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Hydrological data UK



1981 YEARBOOK

INSTITUTE OF HYDROLOGY • BRITISH GEOLOGICAL SURVEY

**HYDROLOGICAL DATA
UNITED KINGDOM**

1981

YEARBOOK

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An account of
rainfall, river flows and groundwater levels
January to December 1981.

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The River Thames, looking upstream from Wallingford Bridge, December 1981.

Photograph: M. Lowing

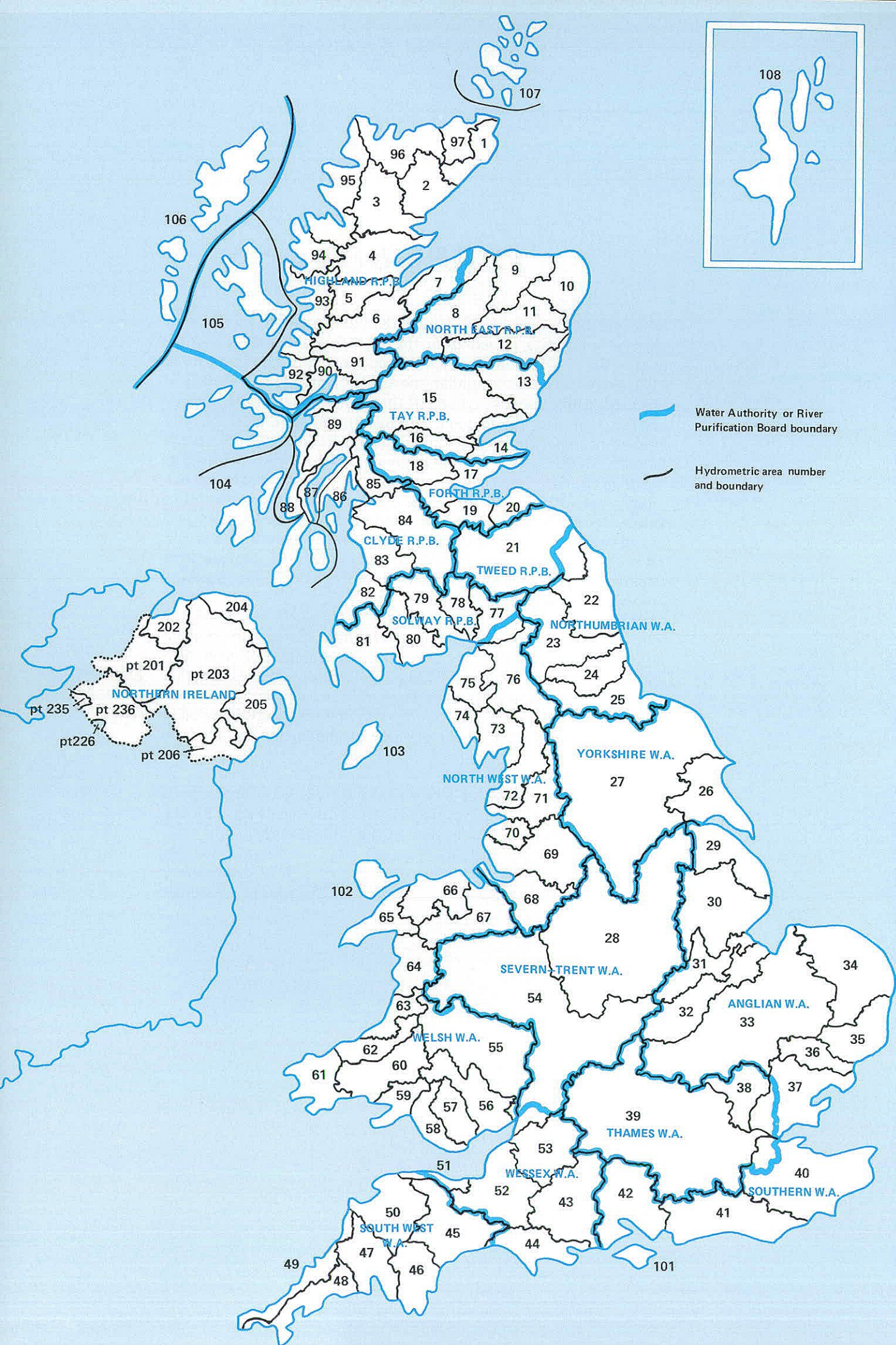
FOREWORD

In April 1982, care of the United Kingdom national archive of surface water data passed from the Department of the Environment's Water Data Unit (which was disbanded) to the Institute of Hydrology (IH). In a similar move, the Institute of Geological Sciences, subsequently renamed the British Geological Survey (BGS), took over the national groundwater archive. Both IH and BGS are component bodies of the Natural Environment Research Council (NERC). The BGS hydrogeologists are located with IH at Wallingford and close cooperation between the two groups has led, among other things, to the decision to publish a single series of yearbooks and reports dealing with nationally archived surface and groundwater data and the use made of them. The work is overseen by a steering committee with representatives of Government departments and the water industry from England, Wales, Scotland and Northern Ireland.

The published series - *Hydrological Data: UK* - will include an annual yearbook and, every five years, a catalogue of river flow gauging stations and groundwater level recording sites together with statistical summaries. These six volumes of the 5-year cycle will be available individually but are also designed to be inserted in a ring binder. Further details of these arrangements are given on page 168.

The series - but not the binder - will also include occasional reports dealing with significant hydrological events and analyses. The first of these reports provides a review of the 1984 drought.

J.S.G. McCulloch
Director, Institute of Hydrology



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INTRODUCTION

This volume is the first Yearbook published in the Hydrological Data: United Kingdom series.

Apart from summary information, surface water and groundwater data on a national basis have been published separately up to now. The 1981 Yearbook brings together the principal data sets relating to river flows, groundwater levels and rainfall throughout the United Kingdom. A description is also given of the surface water and groundwater archives together with the data retrieval facilities which complement this volume. Major changes to the observation borehole network used for national monitoring purposes were recommended in 1981 following a review undertaken on behalf of the Department of the Environment. These changes are outlined within the context of a brief history of groundwater level measurement in the United Kingdom.

Publication of river flow data for Great Britain started with the series of Surface Water Yearbooks. The first edition, which was published in 1938 for the water year (October-September) 1935-36, also included selected data for the previous fifteen years; the edition for 1936-1937 followed in 1939. Both these publications were prepared under the direction of the Inland Water Survey Committee, the fiftieth anniversary of whose founding falls in 1985. Assisted by the Scottish Office, the Committee continued to publish hydrological data after the war; the Yearbook for the period 1937-1945 being published as a single volume in 1952.

Due to economic stringency, the Survey was suspended in 1952 for a period of two years but was then reformed as the Surface Water Survey Centre of Great Britain. A Yearbook covering the years 1945-1953 was published in 1955.

In 1964 the Survey was transferred to the Water Resources Board where it remained until 1974 when the work of collection and publishing surface water information in England and Wales was again transferred, this time to the Water Data Unit of the Department of the Environment.

Yearbooks were published jointly each year by these organisations and the Scottish Office for the water years 1953-54 to 1965-1966, but thereafter information for the five calendar years 1966 to 1970 was published in one volume in 1974. Following editions were renamed 'Surface Water : United Kingdom' to mark the inclusion of the first records from Northern Ireland and in recognition of the move away from single year volumes. Two volumes of Surface Water: United Kingdom, covering the

years 1971-73 and 1974-76 were published jointly by the Water Data Unit, the Scottish Development Department and the Department of the Environment for Northern Ireland.

Following the transfer of the surface water archive to the Natural Environment Research Council in 1982, the final edition of Surface Water: United Kingdom, for the years 1977-80, was prepared by the Institute of Hydrology at the request of the Water Directorate of the Department of the Environment, and published in 1983.

This present volume, the first published by the Natural Environment Research Council, represents the twenty-second edition in the series of surface water publications which began with the 1935-36 Surface Water Yearbook. As a result of the incorporation of groundwater data in the Yearbook, this volume is also the sixth edition in the series of groundwater data publications which began with the 1964-66 Groundwater Yearbook.

A compilation of "Groundwater levels in England during 1963" which was produced by the Geological Survey of Great Britain prior to its incorporation into the Institute of Geological Sciences, was the precursor to the publication of groundwater level data on a national basis. The more formal Groundwater Yearbook series was instigated by the Water Resources Board which published the inaugural edition and a further volume for 1967, both covering England and Wales. In 1975 a third Yearbook, for 1968-70, was published by the Water Data Unit. The Groundwater: United Kingdom series was introduced in 1978 with the production of the 1971-73 volume, also published by the Water Data Unit.

Following the transfer of the groundwater archive to the Institute of Geological Sciences, the second edition of Groundwater: United Kingdom, covering the period 1974-80, was prepared by the Institute of Hydrology at the request of the Water Directorate of the Department of the Environment.

The 1981 Yearbook may be seen as part of the United Kingdom's contribution to UNESCO's International Hydrological Programme in continuing the exchange of hydrological information begun in 1965 for the International Hydrological Decade.

The Natural Environment Research Council acknowledge and extend their appreciation to all who have assisted in the collection of information for this publication.

SCOPE AND SOURCES OF INFORMATION

The format of this yearbook differs substantially from that of its precursors. A greater variety of hydrological information is provided and emphasis is placed upon ready access to basic data both within the yearbook and through the complementary data retrieval facilities.

The contents have been abstracted primarily from the surface water and groundwater archives. Responsibility for the collection and initial processing of the data rests mainly with the ten Water Authorities in England and Wales, the seven River Purification Boards in Scotland and the Department of the Environment (NI) in Northern Ireland. Additional material has been provided by the Greater London Council, the Department of Agriculture in Northern Ireland and by research bodies and public undertakings. The majority of

the rainfall data, and much of the material incorporated in the review of the weather, have been provided by the Meteorological Office.

Some slight variations from the contributors' figures may occur; these may be due to different methods of computation or to the need for uniformity in presentation.

The practice, followed in previous yearbooks, of publishing river water temperature data has been discontinued. Monitoring of water quality, including temperature, is the responsibility of water authorities and river purification boards. Some temperature data are held by the Department of the Environment in association with the Harmonised Monitoring Scheme (contact WQ5, Room A4.26, Romney House, 43 Marsham Street, London SW1P 3PY, tel. 01-212-6902).

REVIEW OF THE WEATHER – IN RELATION TO WATER RESOURCES

For the third year in succession the United Kingdom rainfall total exceeded the 1941–70 average. The range of variation about the average was notably less marked than usual (Fig.1). The wetter areas, with greater than 120% of mean rainfall were confined generally to the Hebrides, northern Scotland, parts of Northern Ireland and north west England. Northumberland and eastern Scotland contained the only extensive areas with below average rainfall; the coastal region near Aberdeen was alone in recording less than 90 per cent of normal rainfall. In terms of actual rainfall amounts, the driest location in the United Kingdom was Etton in Cambridgeshire with 504 mm. The overall range can be assessed by comparison with Delta in north Wales where 4687 mm of rainfall was measured. Figure 2 shows the spatial distribution of 1981 rainfall and Table 1 provides a breakdown of monthly rainfall totals both on a countrywide basis and according to the major administration divisions within the water industry (see frontispiece). The rainfall contrasts between seasons were considerable in 1981 with an unusual sequence of a relatively dry winter, wet spring, dry summer and remarkably wet autumn (Fig.3).

Annual potential evaporation was generally close to the average in 1981. Figure 4 shows that significant departures from the mean were recorded only at Milford Haven, South Wales (85%) and Tynemouth, Northumberland (114%). Most places experienced below the seasonal average evaporation through the spring, and more particularly in May, but well above average values through the autumn.

Rainfall during the winter of 1980–81 (December to February) was close to, or above, average throughout Scotland and Northern Ireland and the water resources outlook for the rest of the year was reassuring. Southern Britain, however, had a drier than average winter with some areas recording less than 50 per cent of average rainfall during January and February. Local concern about the adequacy of water stocks persisted until the remarkably sustained and widespread March rainfall.

Soils throughout the UK were generally at field capacity at the beginning of 1981; the only notable exceptions were the Cambridge area and inland from the Thames estuary where soil moisture deficits reached 25 mm.

The winter rainfall deficit was rapidly made up in the spring which was the fourth wettest in 250 years of record for England and Wales, and the second notably wet spring in three years. The exceptional nature of the March to May rainfall in 1981 is emphasised by Table 2 which ranks the ten

wettest spring periods in the United Kingdom this century. March was particularly extreme, most regions of the United Kingdom had more than twice the average rainfall and, over England and Wales it was the second wettest in the 230 years for which rainfall figures are available (1947 was wetter). More than three times the normal March rainfall occurred in many parts of England and Wales. For example, March rainfall at Waen Sychlwch in the Brecon Beacons totalled 769 mm; considerably greater than the rainfall for the year at most places in eastern England. Waen Sychlwch also registered the year's highest twenty-four hour rainfall total of 146.1 mm on the 21st March. With an estimated return period of two hundred years, this is classified as 'very rare'. Table 3 identifies all the occasions in 1981 when 'very rare' falls occurred. The intense rainfall on the 21st was associated with a complex frontal system which brought heavy rainfall throughout Wales and the West Country. Rainfall intensities of between 3 and 10 mm per hour were maintained over 36 hours in Gwynedd; the highest rainfall totals were recorded to the west and south of Snowdon. Catchments in this region had generally been saturated by previous rainfall, in some places more than twice the average monthly rainfall had already fallen, and the storm of 20/21 March caused extensive flooding.

The first three weeks of April were mainly dry, although in the early hours of the 14th the heaviest thunderstorm on record for April occurred near Horsham in Sussex when precipitation exceeding 80 mm was recorded in 7 hours. An unusually late wintry spell also occurred in April when blizzards affecting the Scottish border region on the 24th moved steadily south to reach south western England on the 26th. The prolonged and widespread snow, with depths over 200 mm in parts of northern England and Scotland, is unparalleled in late April, at least this century. The precipitation fell as sleet or rain in south eastern England and East Anglia with up to 131 mm being recorded in Lincolnshire. The highest rainfall amounts occurred along the scarp slope of the Lincolnshire Wolds; the modest pre-storm soil moisture deficits were quickly eliminated and the ensuing rapid runoff produced severe local flooding. Lincolnshire experienced its most severe fluvial flooding since 1947. Northern Scotland, on the other hand, missed the blizzards and remained dry for the whole month with less than 10 mm of rainfall being recorded at some places around the Moray Firth. During May, most areas of the United Kingdom recorded above average rainfall with parts of

Northern Ireland and eastern England recording more than twice the average. However, much of Scotland, particularly northern areas, received less than half the average. Generally, the rainfall was frequent rather than heavy although on the 27th a violent thunderstorm over the west of Glasgow caused severe flooding when precipitation totalled 60 mm in four hours.

The very wet March delayed the usual slow build-up of soil moisture deficits until the beginning of April when a steady increase until the third week resulted in deficits being generally above the seasonal average. Towards the end of the month, however, values in England and Wales were quickly reduced and over much of eastern England soils were once again at, or close to, field capacity. Over most of Scotland, deficits remained relatively high and this atypical picture of very low values in England and Wales and rather high values over much of Scotland (see Fig.5) persisted throughout May. All areas south of a line from the Severn estuary to the Wash recorded their lowest end of May deficits since areal comparisons began in 1963 and Lossiemouth in north east Scotland had its highest end of May value since 1961.

In marked contrast to the wet spring, United Kingdom rainfall over the summer (June - August) period was only 70 per cent of average. Most of the June rainfall fell when thundery conditions prevailed during the first two weeks. A particularly violent thunderstorm moved north from France during the early hours of the 2nd June with more than 60 mm rainfall recorded during the period 0900 1st to 0900 2nd in a band between West Sussex and Northamptonshire. Within this band intense rain cells produced short duration rainfall totals which, in many places, exceeded a ten year return period. The most exceptional fall occurred at Bournemouth (Hurn Airport) where slightly over 30 mm fell in 21 minutes with an estimated return period of 200 years. The rest of June and July tended to be rather dry although there were days when local storms did occur, notably in Kent at the end of June, central London, Essex and Derbyshire on the 9 July (102 mm was recorded in just under ten hours at Herongate in Essex) and again in central London on the 22nd and 31st July. In the main, August 1981 was a dry month over the whole of the United Kingdom but a noteworthy storm occurred at the beginning of the month when, after a short heatwave, thunderstorms during the night of the 5th and 6th brought precipitation totals which exceeded 100 mm in parts of Greater Manchester and Cheshire. Three major areas were affected by storms: north west England in a broad band from Shrewsbury towards Huddersfield (a maximum of 148 mm was recorded south east of Chester, local flooding and landslides were recorded in and around Manchester); an area near Northampton where 141 mm was recorded at the

storm centre; and a band from Sussex to north west London where total rainfall reached 60 mm. 'Very rare' rainfall intensities were recorded at several locations most notably East Didsbury (Greater Manchester), near the centre of maximum rainfall, where over 85 mm fell in 2 hours 40 minutes having an estimated return period exceeding 1000 years. During five hours starting at 2218 on the 5th nearly 90 mm fell at Manchester airport (Ringway) with a return period of almost 800 years.

June and July brought rapid increases in soil moisture deficits over most of England and Wales but, with spring values having been so modest, the seasonal averages were not reached until mid July over north east England, the Midlands and Wales, and not until mid to late August over much of south east and north west England. In Scotland, however, apart from eastern coastal regions as far north as the Moray Firth, values increased only slowly and in some places decreased. There was a temporary decrease in early August over England (except Cornwall and Devon) and Wales, due to rather widespread and heavy thunderstorms. The deficits returned to the pre-storm values by the end of August and continued to rise to reach a maximum in mid September.

The sequence of alternating wet and dry seasons continued into the autumn. In Scotland the autumn months (September to November) were the wettest period of three consecutive months since countrywide records began in 1869. Overall, the United Kingdom received 140 per cent of average rainfall for the three autumn months. Soil moisture deficits reached their peak in most areas by the end of the second week of September but then rapidly decreased as the month progressed. The wettest day of the year over Great Britain occurred on the 19th September with a rain day (0900 hrs - 0900 hrs) general value of 27 mm, a remarkable amount for the country as a whole. It was the wettest September in Scotland and Northern Ireland since 1950 and the rainfall totals at Stornoway (Western Isles) and Abbotsinch (Glasgow) were the highest in their areas this century. Early October rainfall was exceptionally heavy in the west of the United Kingdom with flooding in places. On the 2nd October, 116 mm fell at Annalong Valley (County Down) another 'very rare' event just exceeding a return period of 450 years. The highest ever three day rainfall total on record was registered in Scotland with a general value of 77 mm between the 1st and 3rd October. November was generally a drier month with only the uplands in the west of England and Wales recording more than the 1941-70 average. Most of southern England received less than half of the mean monthly rainfall. Stornoway (Western Isles) was again exceptionally wet in November, registering a record monthly rainfall total for the second time in the three month autumn period.

REVIEW OF THE WEATHER

December began with mild weather and mainly light rain, but rain in the west on the 8th turned to snow as it moved eastwards to affect a band covering central Wales and central England. On the 13th, substantial precipitation as snow, accompanied by strong winds spread from the west

producing blizzard conditions. Warmer air moved into all parts during the last week of the year producing a thaw. Snowmelt accompanied by heavy rain caused severe flooding in many places especially in the Severn and Yorkshire Ouse valleys.

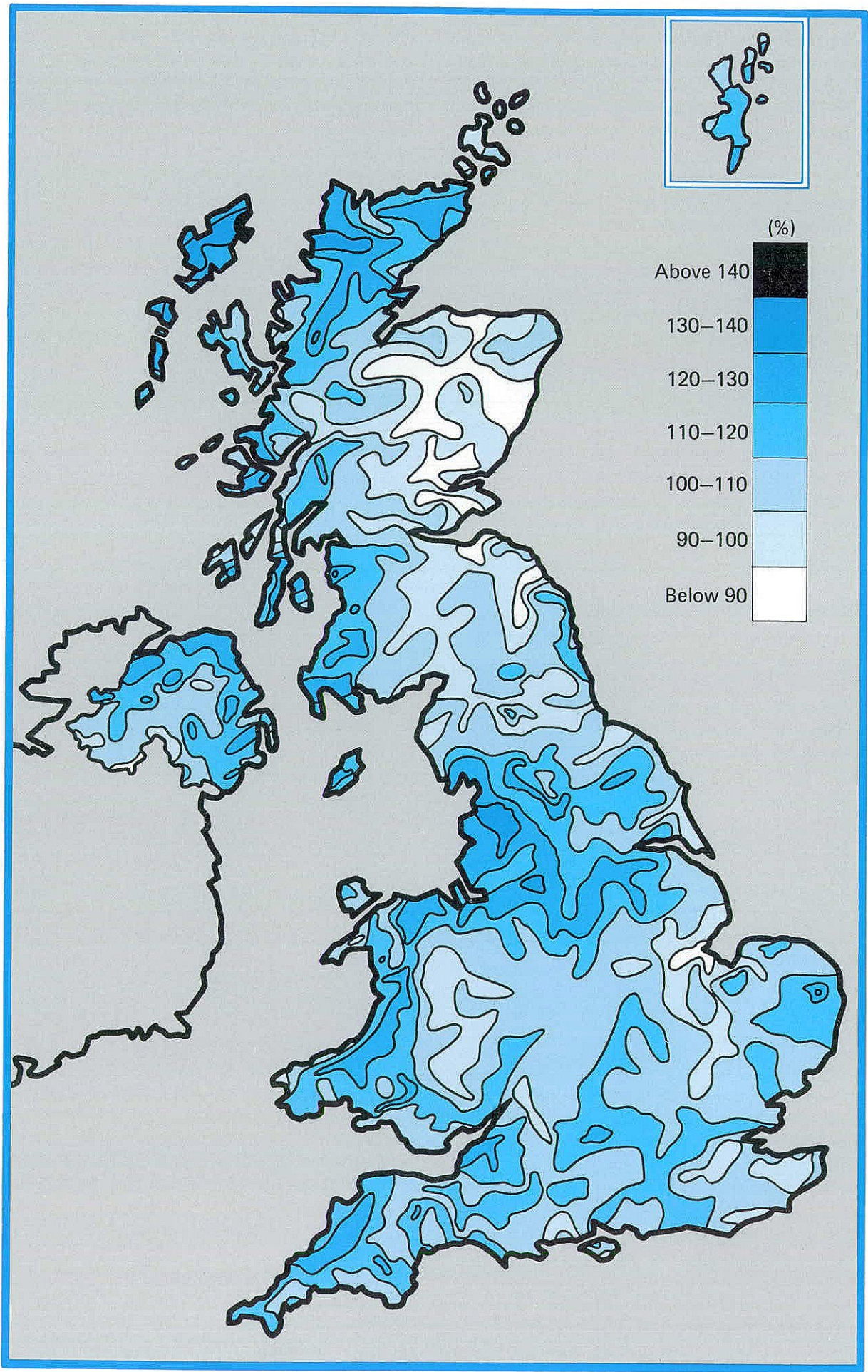


Figure 1. 1981 Annual rainfall as a percentage of the 1941-70 average.

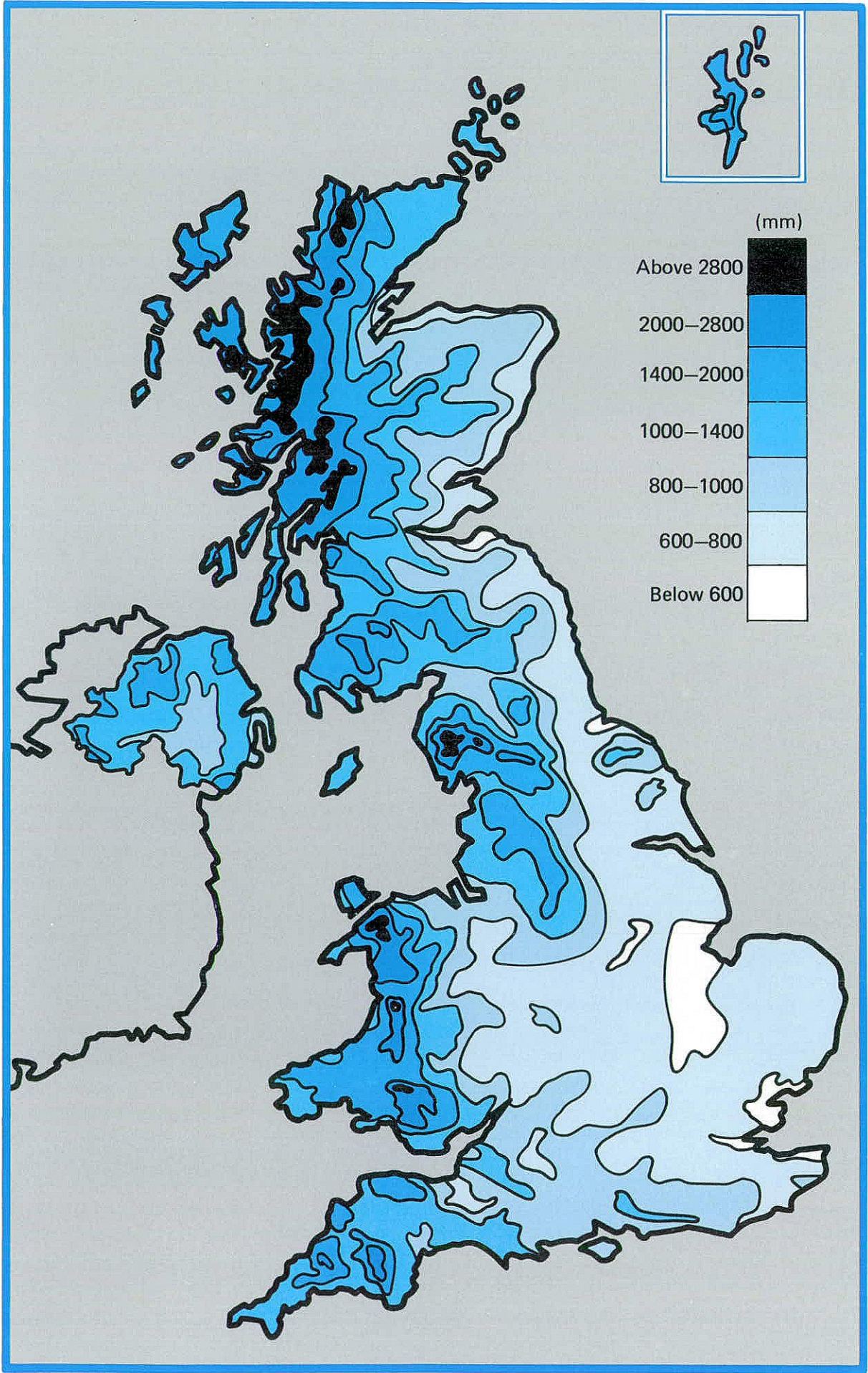


Figure 2. Annual rainfall in 1981.

TABLE 1 1981 RAINFALL IN MM AND AS A PERCENTAGE OF THE 1941-70 AVERAGE

		J	F	M	A	M	J	J	A	S	O	N	D	YEAR
United Kingdom	mm	93	66	151	53	93	68	69	49	173	156	117	92	1180
	%	90	85	216	77	124	93	79	48	170	147	105	81	108
England and Wales	mm	58	53	153	64	91	49	55	48	141	124	69	94	999
	%	67	81	259	110	136	80	75	53	170	149	71	104	110
Scotland	mm	156	91	152	33	87	103	92	52	235	218	216	87	1522
	%	114	87	165	37	96	112	82	40	171	146	152	56	106
Northern Ireland	mm	101	68	128	47	141	88	78	43	175	158	94	93	1214
	%	97	91	183	69	193	111	84	42	164	148	92	82	111
North West Water Auth.	mm	127	71	209	50	90	85	78	67	187	197	158	66	1381
	%	110	88	290	65	110	102	76	54	152	167	131	55	113
Northumbrian Water Auth.	mm	47	43	131	55	62	54	71	27	121	121	88	65	885
	%	59	65	252	100	97	89	92	27	153	161	94	87	101
Severn Trent Water Auth.	mm	50	57	122	61	79	35	32	51	129	87	49	82	834
	%	73	107	235	117	123	63	49	63	193	134	62	117	108
Yorkshire Water Auth.	mm	59	70	151	75	69	39	51	60	114	109	73	65	935
	%	77	109	285	134	113	67	73	67	158	158	82	88	112
Anglian Water Auth.	mm	40	30	95	76	64	31	45	37	80	67	34	50	649
	%	77	71	237	190	136	63	79	58	154	129	55	94	106
Thames Water Auth.	mm	36	22	120	45	91	35	51	44	118	78	41	83	764
	%	58	47	261	98	163	67	85	63	190	122	56	129	109
Southern Water Auth.	mm	33	30	135	42	93	47	42	30	143	107	43	94	839
	%	43	53	260	87	169	94	71	41	201	137	46	116	106
Wessex Water Auth.	mm	42	47	149	39	97	41	57	23	145	106	49	130	925
	%	50	80	257	72	143	76	97	28	183	129	51	144	106
South West Water Auth.	mm	75	89	199	44	145	56	71	21	182	191	73	207	1353
	%	58	99	237	62	173	86	85	21	175	169	55	153	113
Welsh Water Auth.	mm	86	86	275	52	119	66	55	41	232	223	120	124	1479
	%	63	90	316	61	131	81	58	35	186	173	84	85	111
Highland R.P.B.	mm	251	133	153	42	65	115	90	77	262	288	361	85	1922
	%	153	100	134	37	63	105	71	52	166	155	214	43	112
North East R.P.B.	mm	101	47	83	21	44	74	70	25	139	168	112	77	961
	%	111	63	134	34	57	106	76	23	160	173	109	75	94
Tay R.P.B.	mm	98	83	145	17	90	68	70	20	230	148	152	87	1208
	%	83	90	177	23	95	82	69	17	200	121	128	65	96
Forth R.P.B.	mm	77	64	139	17	79	77	73	17	193	162	142	55	1095
	%	78	83	201	25	94	103	75	15	179	153	131	51	98
Clyde R.P.B.	mm	222	118	184	29	108	117	115	62	291	234	277	71	1828
	%	138	104	175	28	111	114	89	44	166	128	166	38	110
Tweed R.P.B.	mm	51	45	130	37	78	77	87	21	140	143	104	69	982
	%	55	65	224	61	103	113	98	18	151	163	100	77	98
Solway R.P.B.	mm	147	85	188	46	109	118	99	38	232	208	179	64	1513
	%	105	91	207	52	119	131	90	29	154	144	123	42	106
Western Isles Orkney & Shetland	mm	167	104	121	44	55	88	70	105	185	223	150	111	1523
	%	123	101	132	49	81	116	88	112	147	155	182	73	118

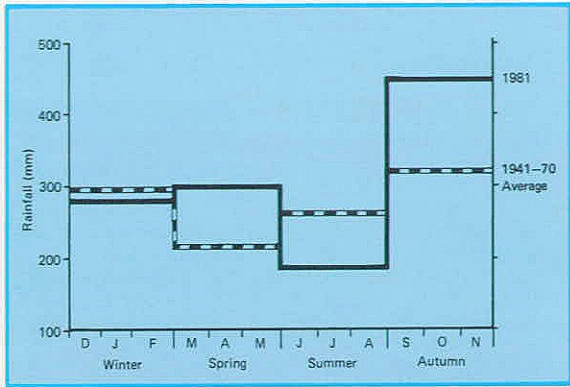


Figure 3. Seasonal rainfall in 1981 compared with the 1941-70 average.

TABLE 2. THE WETTEST SPRINGS (MARCH-MAY INCLUSIVE) IN THE UNITED KINGDOM SINCE 1900

Rank	Year	Rainfall (mm)
1	1979	337
2	1947	328
3	1913	303
4	1981	297
5	1920	295
6	1967	292
7	1932	280
8	1903	275
9	1963	271
10	1951	257

TABLE 3 'VERY RARE' DAILY RAINFALL TOTALS IN 1981

Date (Rain- day)	Station Number	Name	Grid Reference	Amount (mm)	Return Period (1 in x years)*
21. 3.81	502167	Waen Sychlwch	SN 804 220	146.1	225
13. 4.81	315409	Fulking	TQ 246 114	103.0E	225
5. 8.81	158443	Norton Lock	SP 605 656	89.0	300
5. 8.81	553671	Delamere Power Stn.	SP 562 677	124.0	950
5. 8.81	553821	Tiresford	SJ 557 612	104.2	505
5. 8.81	553849	Eaton Power Stn.	SJ 569 685	132.0	1480
5. 8.81	554163	Northwich, Hunts Lock	SJ 656 729	86.2E	220
5. 8.81	556725	Northwich, S. Wks	SJ 639 742	103.0	550
5. 8.81	556848	Crabtree Green	SJ 584 711	138.0	1750
5. 8.81	560321	East Didsbury	SJ 857 905	100.5	510
5. 8.81	564419	Ringway Met. Office	SJ 821 849	95.9	380
6. 8.81	245166	Crouch End, Priory Park	TQ 300 891	84.9	165
20. 9.81	741369	Ullapool	NH 126 940	106.8	305
20. 9.81	741899	Strath Kanaird Power Stn.	NC 149 013	117.6	250
20. 9.81	741928	Dubh Loch	NH 150 995	142.9E	795
1.10.81	633631	Panure	NX 452 646	97.0	225
1.10.81	903588	Donolly Res.	NT 580 690	94.3	180
1.10.81	903637	Nunraw Abbey	NT 594 700	94.0	210
2.10.81	975486	Annalong Valley	IJ 355 225	116.2	450
2.10.81	975691	Silent Valley W. Wks	IJ 305 216	106.1	375
9.11.81	722623	Skye: Heaste	NG 647 178	121.8	180

*Based on the methods and findings of the Flood Studies Report Vol II¹ (as implemented on the Meteorological Office computer²) whereby a return period can be assigned to the catch at a particular raingauge. Those exceeding a 160 year return period are classified as 'very rare' events.

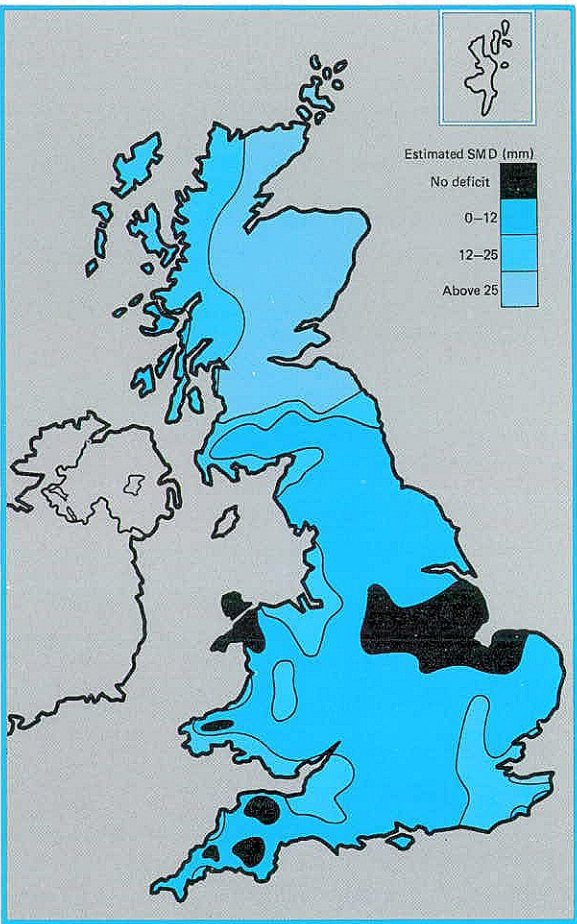
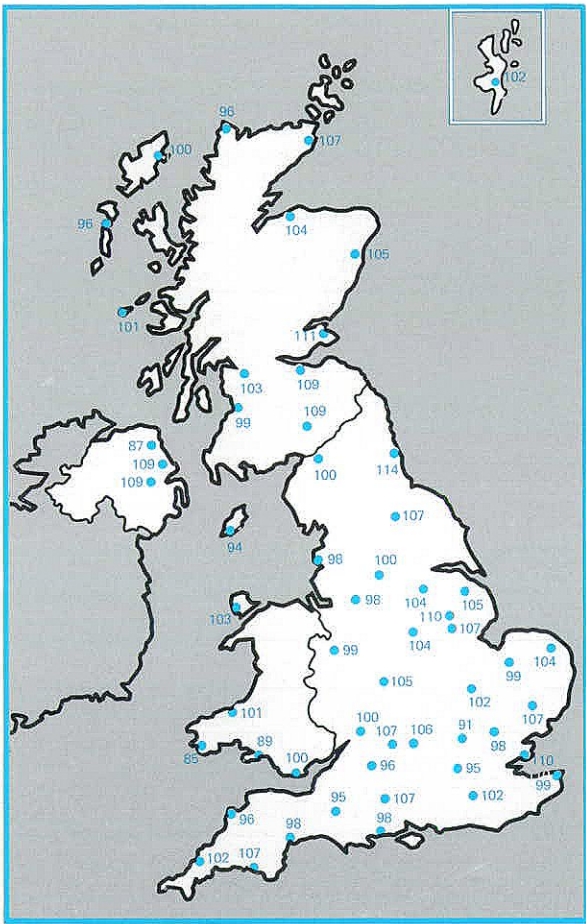
E - estimated rainfall total

¹Flood Studies Report 1975. Natural Environment Research Council (5 vols).

²Keers J.F. and Wescott P. 1977. A computer-based model for design rainfall in the United Kingdom: Meteorological Office Scientific Paper No.36.

Figure 4. Potential evaporation in 1981 as a percentage of the long term average.

Figure 5. Estimated soil moisture deficits on 26 April 1981.



REVIEW OF RUNOFF

Runoff from the United Kingdom in 1981 was above average continuing the sequence of high runoff years which have followed the 1975/76 drought. Overall, runoff was approximately 640 mm; about twenty per cent above normal with only limited spatial variation from the general pattern. The increased river flows in 1981 reflect both the above average rainfall and its greater hydrological effectiveness; precipitation being substantial in the spring and autumn when evaporation rates are moderate. Although the seasonal contrasts in river flow were particularly marked in 1981, low flows were generally higher than in a typical year, substantially so in those rivers having a high baseflow component. A prevalence of periods of sustained high river flows also characterised 1981 although extensive flooding was uncommon.

Figure 6 provides a guide to runoff, expressed as a percentage of the period of record average, in Great Britain for 1981. The map is based upon discharge data from over 400 gauging stations and is least precise in northern Scotland where the monitoring network is sparse. A considerable measure of spatial uniformity is evident. Runoff exceeded 140 per cent of average only in a few, mainly coastal, areas and, on a regional basis, was nowhere significantly below its mean annual value although much of eastern Scotland and Northumberland registered between 90 and 100 per cent of the mean.

The distribution of river flows throughout 1981 is illustrated by daily and monthly hydrographs (Fig.7 a-d) for individual gauging stations in England, Scotland, Wales and Northern Ireland; the monthly hydrographs are superimposed upon the corresponding maximum, minimum and mean values for the period of record. Also shown is the single year, and period of record flow duration curves, which allow 1981 flows to be compared with the average flow regime. On the River Tay, for instance, the flows exceeded for 50 per cent and 95 per cent of the time, were close to the average in 1981 whereas on the River Thames these measures of medium and low flows were substantially higher than those derived from the previous record.

Throughout most of England and Wales the year began with river flows considerably below the seasonal average. In Scotland, however, January runoff was high particularly in the west and the north where the River Findhorn recorded nearly twice the average runoff. A relatively uniform pattern of below average runoff was maintained throughout February in most regions of the United Kingdom south of the Scottish Highlands.

The heavy and sustained March rainfall was accompanied by a rapid recovery in river discharges and many rivers with relatively short records

registered new maximum March runoff totals in 1981. Unprecedented daily flows were also recorded in mid month for a number of rivers in south Wales and south west England. Total runoff from the River Exe catchment and from the Wye basin approached three times the March average. High discharges characterised March river flows throughout Wales and the storms of the 20/21 March caused flooding in the north and the south of the Principality. In Gwynedd, the flood on the River Gwyrfa was the highest since 1970 and on the Glaslyn, the flood peak was the second highest since 1961. In south Wales the River Usk overtopped its banks and inundated the flood plain downstream of Brecon, a return period of one in ten years being ascribed to this event.

Over much of England and Wales river flows remained high in April and between the 24th and 26th very heavy rainfall combined with melting snow to cause widespread flooding in East Anglia and the Lincolnshire Wolds. Lincolnshire experienced its most severe non-tidal flooding since 1947. Breaches in flood banks were common resulting in widespread inundation, and some 2000 hectares and 250 residential properties were affected. The return period of the flood was estimated at 200 years on the River Bain and 60 years for the discharges in the Rivers Ancholme and Barlings Eau. A similar severity was ascribed to the River Bure flood in Norfolk and flows in the Rivers Wensum and Tud were the highest recorded since 1960. The middle reaches of the Great Ouse carried a flood approaching the 1947 level and, similarly, the discharge recorded at Wansford on the River Nene was the highest for 34 years.

May runoff was very modest in Scotland, particularly in the north. The Findhorn recorded its lowest combined runoff total for April and May in a 23 year record. In contrast, May runoff in the river Exe (Devon) basin was the highest on record; a new monthly maximum had also been established in March. Generally, rivers in England and Wales recorded notably high spring runoff totals; the associated substantial replenishment of reservoirs and aquifers resulted in water stocks being at seasonally high levels entering the summer.

Intense thunderstorms at the beginning of June caused localised flooding in a number of areas. The River Adur in Sussex breached its banks flooding several roads and inundating some 250 houses and several light industrial premises near Worthing. From about mid June, however, river flows receded steadily and the control exercised by catchment geology on the pattern of low flows became increasingly evident. Rivers draining steep impermeable catchments receded quickly with only

limited rainfall and by August the Spey, the Wharfe and the Exe, for example, were below half the normal seasonal flow. On the other hand, flows in the Mimmer and the Kennet, both draining chalk catchments with summer discharge maintained predominantly from groundwater storage, remained significantly above average throughout the June to August period; the Kennet recording its second highest summer runoff in a twenty year record.

The low flow sequences in the west and the north of Great Britain were of short duration and not exceptional even though limited restrictions on water use became necessary in south Wales and south west England.

A number of high intensity rainfall events, often associated with thunderstorms, caused serious flooding in local urban and rural sewers and drains but, generally, the summer rainfall was too localised to produce floods in the larger river catchments. Even so, the measured flood peaks in the River Hogsmill at Kingston and the Wye in Buckinghamshire, following a thunderstorm during the 5/6 August, gave estimated return periods of between 25 and 50 years.

River flows increased in the autumn, often markedly. Runoff during October was particularly heavy and many catchments experienced a sequence of high, or very high flows. In Northern Ireland, rivers in the east recorded unprecedented flows early in the month although the significance of the flood discharges needs to take account of the relatively short river flow records in the Province; most are less than ten years. The large month by month variability in runoff which characterised much of the United Kingdom in 1981 continued as flows declined, often rapidly, in November. Nonetheless, total autumn runoff was well above average in all regions particularly in Scotland.

Winter began with rivers close to, or a little above, the seasonal average in England and Wales but they fell quickly in Scotland during December. Regional variations in runoff totals were strongly influenced by the amount and speed of snowmelt following the early and widespread snowfalls in December. In northern England, particularly Yorkshire, the ensuing thaw, accompanied by rainfall, brought widespread and severe flooding the major impact of which occurred in early January 1982.

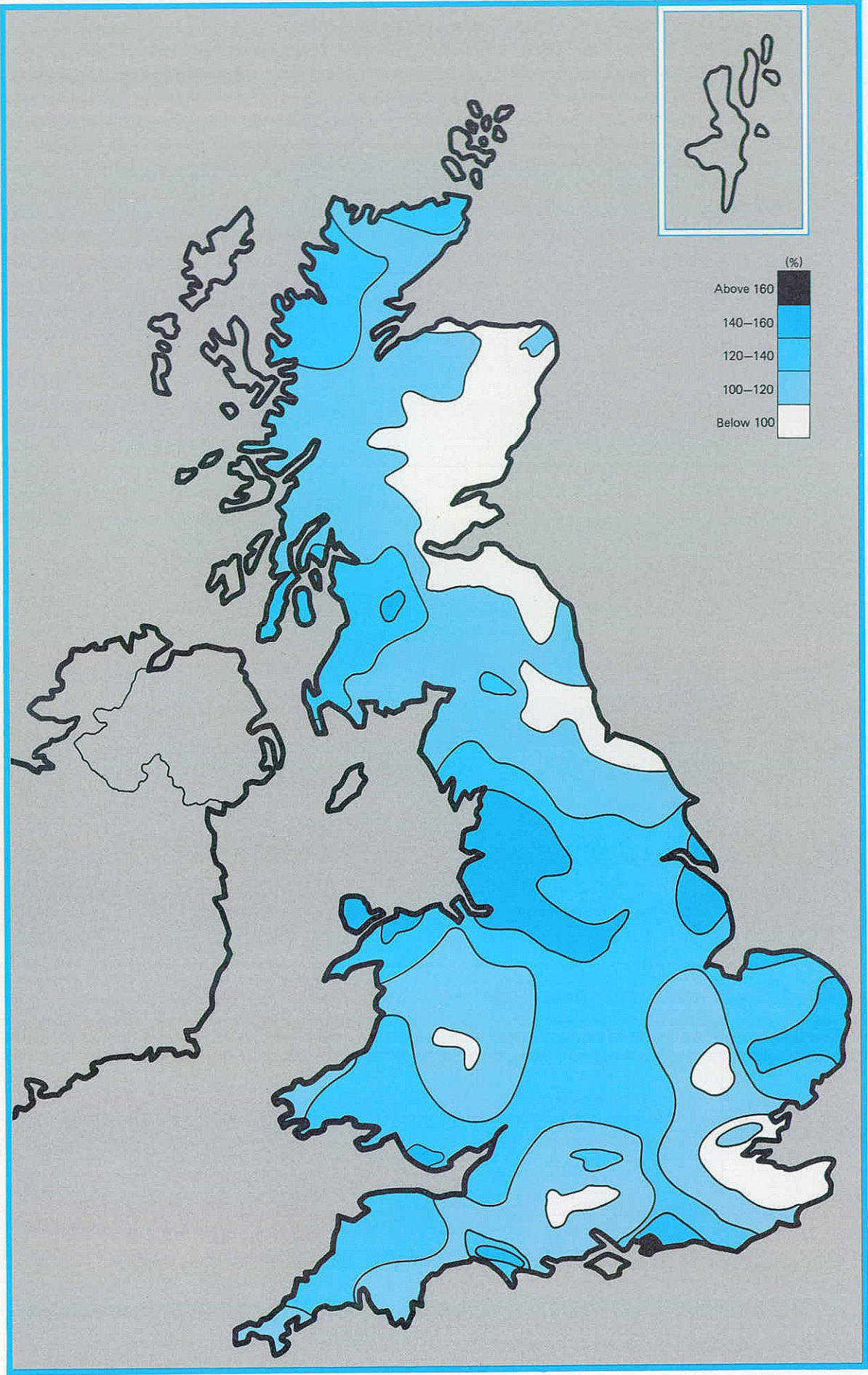


Figure 6. A guide to 1981 runoff expressed as a percentage of the long term average.

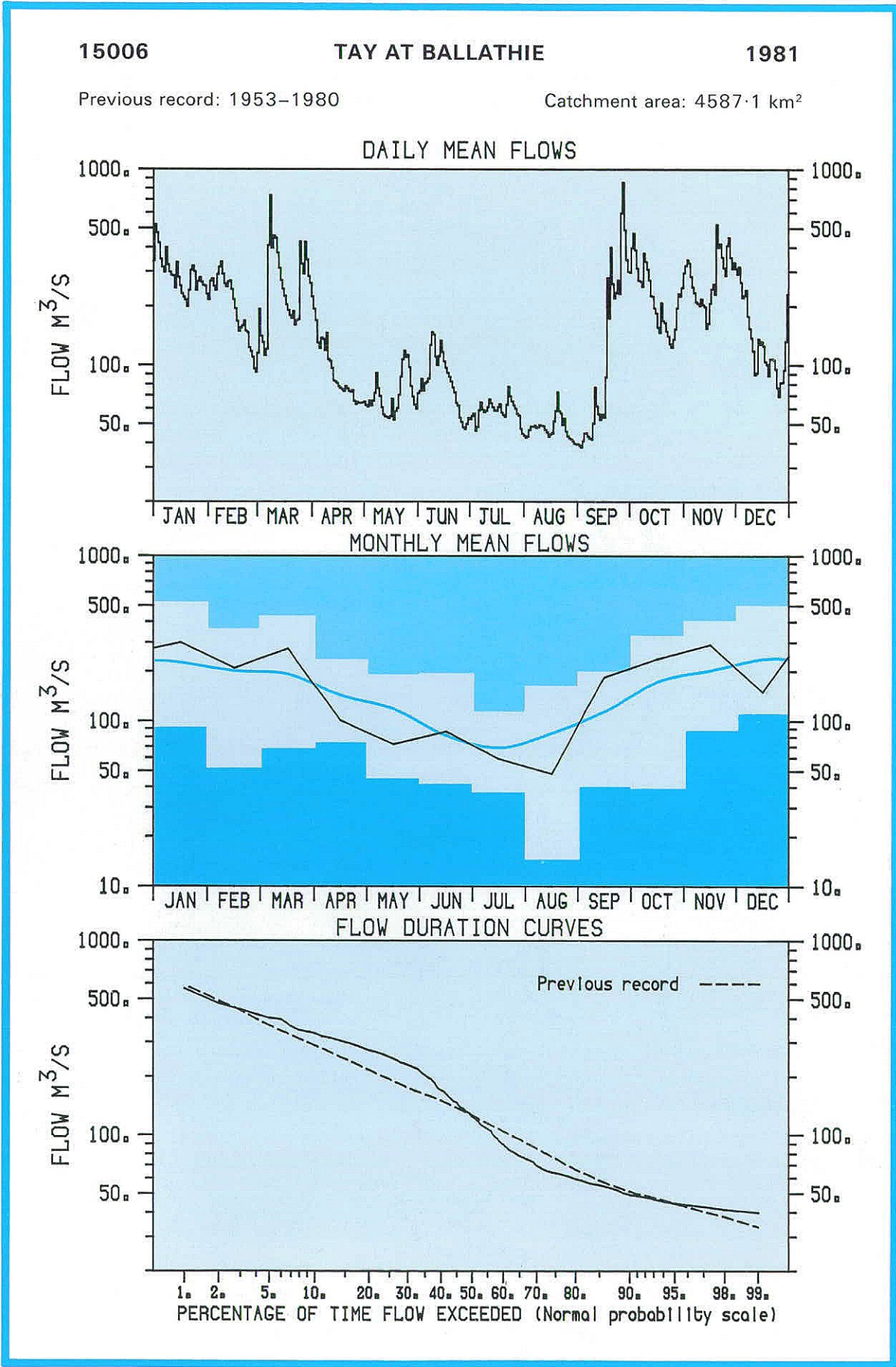


Figure 7(a). 1981 River flow patterns: Tay at Ballathie.

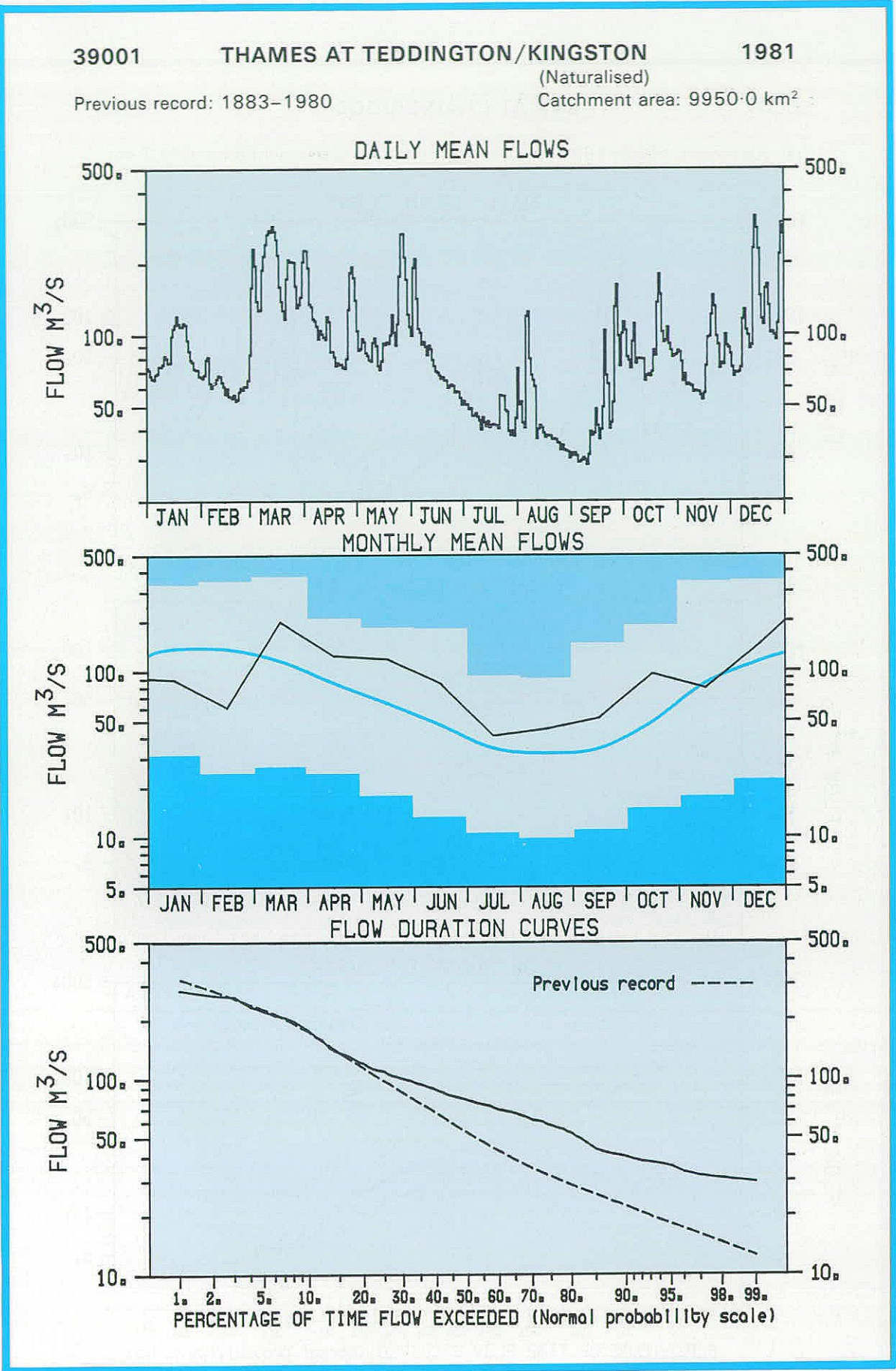


Figure 7(b). 1981 River flow patterns: Thames at Teddington/Kingston.

56001

USK AT CHAINBRIDGE

1981

Previous record: 1958-1980

Catchment area: 911.7 km²

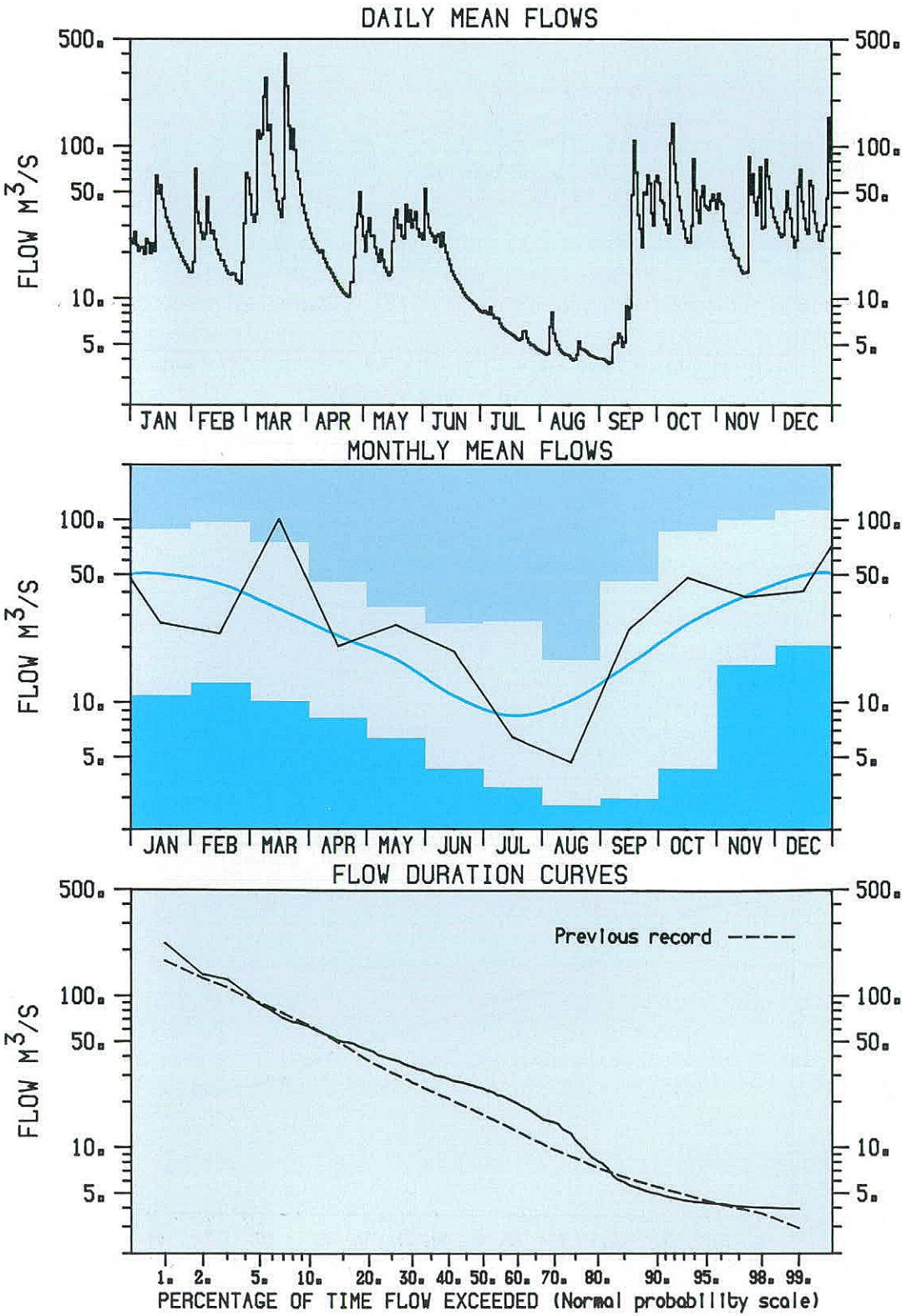


Figure 7(c). 1981 River flow patterns: Usk at Chainbridge.

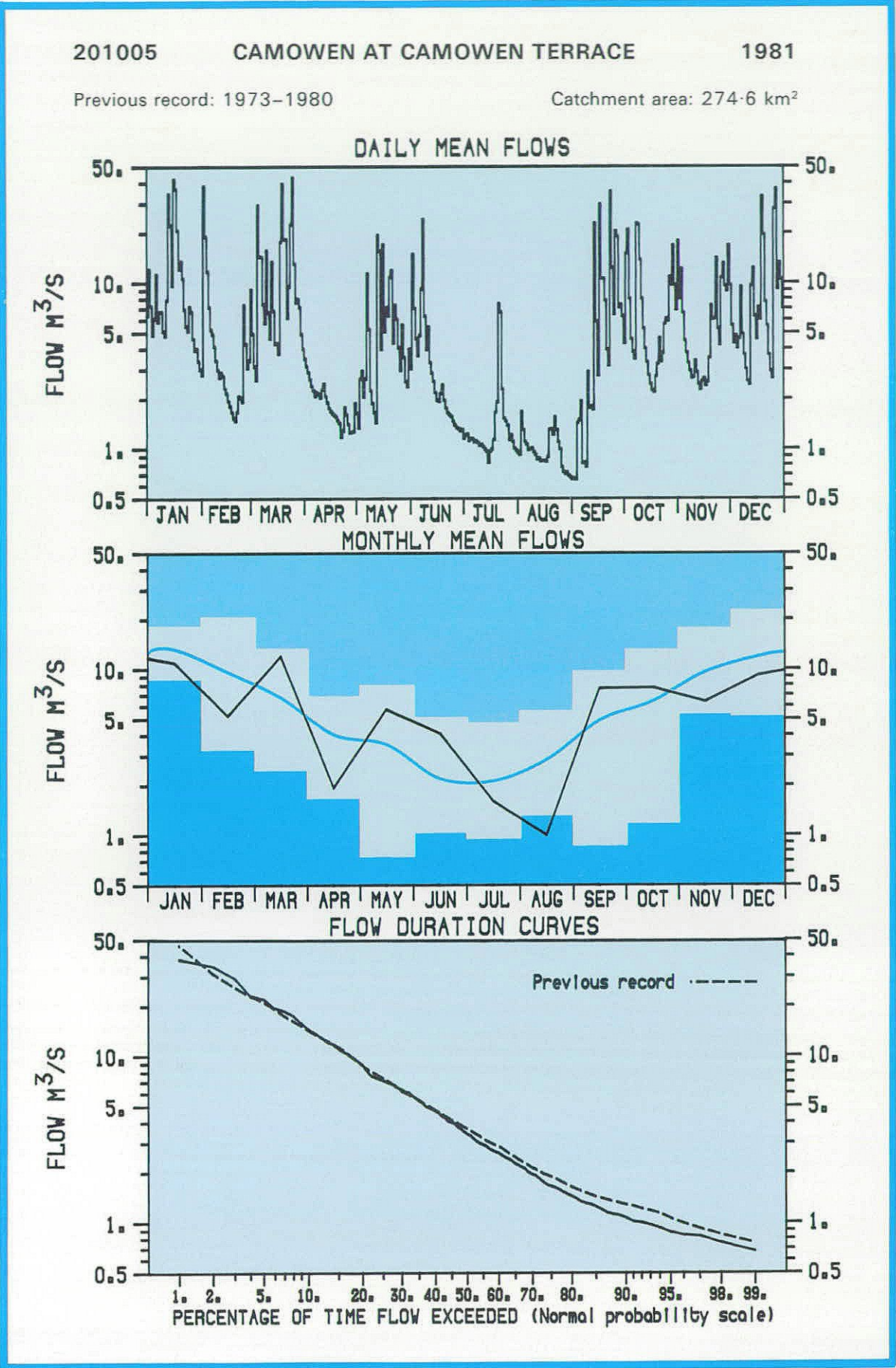


Figure 7(d). 1981 River flow patterns: Camowen at Camowen Terrace.

COMPUTATION AND ACCURACY OF GAUGED FLOWS

Gauged flows are generally calculated by the conversion of the record of stage, or water level, using a stage-discharge relation, often referred to as the rating or calibration. Stage is measured and recorded against time by instruments usually actuated by a float in a stilling well. The instrument records the level either continuously by pen and chart, or digitally on punched tape or solid-state logger, generally at regular (normally 15 minute) intervals. This stage data is normally collected routinely, typically at weekly or monthly intervals, and taken to a regional centre for processing. At some gauging stations provision is made for the routine transmission of river levels directly to the processing centre, by telephone line or, less commonly, by radio; on occasions, satellites have been used to receive and re-transmit the radio signal. Often, both digital and analogue recording devices are deployed at gauging stations to provide a measure of security against loss of record caused by instrument malfunction.

The stage-discharge relation is obtained either by installing a gauging structure, usually a weir or flume with known hydraulic characteristics, or by measuring the stream velocity and cross-sectional area at points throughout the range of flow at a site characterised by its ability to maintain the relationship.

The accuracy of the processed gauged flows therefore depends upon several factors:

- i. accuracy and reliability in measuring and recording water levels,
- ii. accuracy and reliability of the derived stage-discharge relation, and
- iii. concurrency of revised ratings and the stage record with respect to changes in the station control.

Flow data from ultrasonic gauging stations are computed on-site where the times are measured for acoustic pulses to traverse a river section along an oblique path in both directions. The mean river velocity is related to the difference in the two timings and the flow is then assessed using the river's cross-sectional area. Accurate computed flows can be expected for stable river sections and within a range in stage that permits good estimates of mean channel velocity to be derived from a velocity traverse set at a single depth, or at a series of fixed depths.

Flow data from electromagnetic gauging stations may also be computed on site. The technique requires the measurement of the electromotive force (emf) induced in flowing water as it cuts a vertical magnetic field generated by means of a large coil buried beneath the river bed, or constructed above it. This emf is sensed by electrodes at each side of the river and is directly proportional to the average velocity in the cross-section.

British and International Standards are followed as far as possible in the design, installation and operation of gauging stations. Most of these Standards include a section devoted to accuracy, which results in recommendations for reducing uncertainties in discharge measurements and for estimating the extent of the uncertainties which do arise.

The national surface water archive exists to provide not only a central database and retrieval service but also an extra level of hydrological validation. To further this aim, project staff at the Institute liaise with their counterparts in the Water Industry on a regional basis and, by visiting gauging stations and data processing centres, are acquiring the necessary knowledge of local conditions and problems.

SCOPE OF FLOW DATA TABULATIONS

River flow data are presented in two parts. In the first, daily mean gauged flows are tabulated for 49 gauging stations; daily naturalised flows (see p. 25) are also tabulated for the River Thames at Kingston. Monthly flow data for a further 163 gauging stations are given in the second part. The featured gauging stations have been selected to give a broad geographical coverage and to typify a wide range of catchment types found throughout the United Kingdom. A map (Fig. 8) is provided on page 21 to assist in locating the gauging stations featured in this section.

For each gauging station, basic reference information is also given together with comparative average, and extreme, river flow and rainfall figures based upon the archived record.

Explanatory notes precede the two sets of tables and will assist in the interpretation of particular items. The notes relating to the daily flow tables are given on pages 23 to 25; those relating to the monthly data are given on page 76.

STATIONS FOR WHICH DAILY OR MONTHLY DATA ARE GIVEN IN THE RIVER FLOW SECTION

STATION NUMBER	RIVER NAME AND STATION NAME	STATION NUMBER	RIVER NAME AND STATION NAME
3003	OYKEL AT EASTER TURNAIG	28080	TAME AT LEA MARSTON LAKES
4001	CONON AT MOY BRIDGE	29003	LUD AT LOUTH
7002	FINDHORN AT FORRES	30001	WITHAM AT CLAYPOLE MILL
8006	SPEY AT BOAT O BRIG	30004	PARTNEY LYMN AT PARTNEY MILL
9002	DEVERON AT MUIRESK	31002	GLEN AT KATES BRIDGE
10002	UGIE AT INVERUGIE	31007	WELLAND AT BARROWDEN
11001	DON AT PARKHILL	31010	CHATER AT FOSTERS BRIDGE
12001	DEE AT WOODEND	32001	NENE AT ORTON
13007	NORTH ESK AT LOGIE MILL	32003	HARPERS BROOK AT OLD MILLS BRIDGE
14001	EDEN AT KEMBACK	32004	ISE BROOK AT HARROWDEN OLD MILL
15006	TAY AT BALLATHIE	33002	BEDFORD OUSE AT BEDFORD
16003	RUCHILL WATER AT CULTYBRAGGAN	33003	CAM AT BOTTISHAM
16004	EARN AT FORTEVIOT BRIDGE	33004	LARK AT ISLEHAM
17002	LEVEN AT LEVEN	33012	KYM AT MEAGRE FARM
17005	AVON AT POLMONTHILL	33013	SAPISTON AT RECTORY BRIDGE
18003	TEITH AT BRIDGE OF TEITH	33014	LARK AT TEMPLE
18005	ALLAN WATER AT BRIDGE OF ALLAN	33024	CAM AT DERNFORD
19001	ALMOND AT CRAIGIEHALL	33032	HEACHAM AT HEACHAM
20001	TYNE AT EAST LINTON	33034	LITTLE OUSE AT ABBEY HEATH
21006	TWEED AT BOLESIDE	34001	YARE AT COLNEY
21009	TWEED AT NORHAM	34006	WAVENEY AT NEEDHAM MILL
21012	TEVIOT AT HAWICK	34018	STIFFKEY AT WARHAM ALL SAINTS
21018	LYNE WATER AT LYNE STATION	35002	DEBEN AT NAUNTON HALL
21022	WHITE ADDER WATER AT HUTTON CASTLE	36006	STOUR AT LANGHAM
22001	COQUET AT MORWICK	37001	RODING AT REDBRIDGE
22006	BLYTHE AT HARTFORD BRIDGE	37005	COLNE AT LEXDEN
23001	TYNE AT BYWELL	37008	CHELMER AT SPRINGFIELD
23006	SOUTH TYNE AT FEATHERSTONE	37010	BLACKWATER AT APPLEFORD BRIDGE
23007	DERWENT AT ROWLANDS GILL	37014	RODING AT HIGH ONGAR
24004	BEDBURN BECK AT BEDBURN	38003	MIMRAM AT PANSHANGER PARK
24009	WEAR AT CHESTER LE STREET	38007	CANONS BROOK AT ELIZABETH WAY
25001	TEES AT BROKEN SCAR	38021	TURKEY BROOK AT ALBANY PARK
25006	GRETA AT RUTHERFORD BRIDGE	39001	THAMES AT TEDDINGTON/KINGSTON
25018	TEES AT MIDDLETON IN TEESDALE	39002	THAMES AT DAYS WEIR
25019	LEVEN AT EASBY	39007	BLACKWATER AT SWALLOWFIELD
25020	SKERNE AT PRESTON LE SKERNE	39011	WEY AT TILFORD
26003	FOSTON BECK AT FOSTON MILL	39014	VER AT HANSTEADS
26004	GYPSY RACE AT BRIDLINGTON	39016	KENNET AT THEALE
27002	WHARFE AT FLINT MILL WEIR	39019	LAMBOURN AT SHAW
27007	URE AT WESTWICK LOCK	39020	COLN AT BIBURY
27025	ROTHER AT WOODHOUSE MILL	39022	LODDON AT SHEEPBRIDGE
27031	COLNE AT COLNEBRIDGE	39023	WYE AT HEDSOR
27035	AIRE AT KILDWICK BRIDGE	39026	CHERWELL AT BANBURY
27041	DERWENT AT BUTTERCRAMBE	39049	SILK STREAM AT COLINDEEP LANE
27042	DOVE AT KIRKBY MILLS	39069	MOLE AT KINNERSLEY MANOR
27043	WHARFE AT ADDINGHAM	40003	MEDWAY AT TESTON
27053	NIDD AT BIRSTWITH	40004	ROTHER AT UDIAM
27059	LAVER AT RIPON	40005	BEULT AT STILE BRIDGE
28009	TRENT AT COLWICK	40009	TEISE AT STONE BRIDGE
28010	DERWENT AT LONGBRIDGE WEIR	41001	NUNNINGHAM STREAM AT TILLEY BRIDGE
28018	DOVE AT MARSTON ON DOVE		
28031	MANIFOLD AT ILAM		
28039	REA AT CALTHORPE PARK		
28072	GREET AT SOUTHWELL		

continued on p. 22



Figure 8. Gauging station location map

41005	OUSE AT GOLD BRIDGE	62001	TEIFI AT GLAN TEIFI
41006	UCK AT ISFIELD	63001	YSTWYTH AT PONT LLOLWYN
41016	CUCKMERE AT COWBEECH	64001	DOVEY AT DOVEY BRIDGE
41025	LOXWOOD STREAM AT DRUNGEWICK	65001	GLASLYN AT BEDDGELEERT
42003	LYMINGTON AT BROCKENHURST PARK	65005	ERCH AT PENCAENEWYDD
42006	MEON AT MISLINGFORD	66006	ELWY AT PONT Y GWYDDEL
42008	CHERITON STREAM AT SEWARDS BRIDGE	67008	ALYN AT PONT Y CAPEL
42010	ITCHEN AT HIGHBRIDGE	67015	DEE AT MANLEY HALL
42012	ANTON AT FULLERTON	67025	CLYWEDOG AT BOWLING BANK
43005	AVON AT AMESBURY	68001	WEAVER AT ASHBROOK
43007	STOUR AT THROOP MILL	68003	DANE AT RUDHEATH
44002	PIDDLE AT BAGGS MILL	68020	GOWY AT BRIDGE TRAFFORD
45001	EXE AT THORVERTON	69002	IRWELL AT ADELPHI WEIR
45003	CULM AT WOODMILL	69003	IRK AT SCOTLAND WEIR
45005	OTTER AT DOTTON	69006	BOLLIN AT DUNHAM MASSEY
46002	TEIGN AT PRESTON	69007	MERSEY AT ASHTON WEIR
46003	DART AT AUSTINS BRIDGE	69015	ETHEROW AT COMPSTALL
47001	TAMAR AT GUNNISLAKE	70004	YARROW AT CROSTON MILL
47007	YEALM AT PUSLINCH	71001	RIBBLE AT SAMLESBURY
47008	THRUSHEL AT TINHAY	71004	CALDER AT WHALLEY WEIR
48001	FOWEY AT TREKEIVESTEPS	71010	PENDLE WATER AT BARDEN LANE
48004	WARLEGGAN AT TRENGOFFE	72002	WYRE AT ST MICHAELS
48005	KENWYN AT TRURO	72004	LUNE AT CATON
48011	FOWEY AT RESTORMEL	73002	CRAKE AT LOW NIBTHWAITE
49001	CAMEL AT DENBY	73005	KENT AT SEDGWICK
49002	HAYLE AT ST ERTH	73008	BELA AT BEETHAM
50001	TAW AT UMBERLEIGH	73010	LEVEN AT NEWBY BRIDGE
50002	TORRIDGE AT TORRINGTON	74001	DUDDON AT DUDDON HALL
52005	TONE AT BISHOPS HULL	74002	IRT AT GALESYKE
52006	YEO AT PEN MILL	74005	EHEN AT BRAYSTONES
52007	PARRETT AT CHISELBOROUGH	75002	DERWENT AT CAMERTON
53004	CHEW AT COMPTON DANDO	75004	COCKER AT SOUTHWAITTE BRIDGE
53006	FROME (BRISTOL) AT FRENCHAY	76007	EDEN AT SHEEPMOUNT
53007	FROME (SOMERSET) AT TELLISFORD	76015	EAMONT AT POOLEY BRIDGE
53009	WELLOW BROOK AT WELLOW	78003	ANNAN AT BRYDEKIRK
53018	AVON AT BATHFORD	78004	KINNEL WATER AT REDHALL
54001	SEVERN AT BEWDLEY	79006	NITH AT DRUMLANRIG
54002	AVON AT EVESHAM	80001	URR AT DALBEATTIE
55008	WYE AT CEFN BRWYN	81003	LUCE AT AIRYHEMMING
55012	IRFON AT CILMERY	82001	GIRVAN AT ROBSTONE
55014	LUGG AT BYTON	83003	AYR AT CATRINE
55023	WYE AT REDBROOK	84001	KELVIN AT KILLERMONT
55026	WYE AT DDOL FARM	84005	CLYDE AT BLAIRSTON
56001	USK AT CHAIN BRIDGE	84009	NETHAN AT KIRKMUIRHILL
56002	EBBW AT RHIWDERYN	85001	LEVEN AT LINNBRANE
56007	SENNI AT PONT HEN HAFOD	85003	FALLOCH AT GLENFALLOCH
56013	YSCIR AT PONTARYSCIR	94001	FWE AT POOLEWE
57005	TAFF AT PONTYPRIDD	95001	INVER AT LITTLE ASSYNT
57008	RHYMMEY AT LLANEDERYN	96001	HALLADALE AT HALLADALE
58001	OGMORE AT BRIDGEND	101002	MEDINA AT UPPER SHIDE
58006	MELLTE AT PONTNEATHVAUGHAN	201005	CAMOWEN AT CAMOWEN
59001	Tawe AT YNYS TANGIWS	201007	BURNDENNET AT BURNDENNET BRIDGE
60003	TAF AT CLOG Y FRAN	203010	BLACKWATER AT MAYDOWN BRIDGE
61003	GWAUN AT CILRHIEDYN BRIDGE	205005	RAVERNET AT RAVERNET

Part (i) – the daily mean flow tabulations

Station Number

The gauging station number is a unique six digit reference number which serves as the primary identifier of the station record on the surface water archive. The first digit is a regional identifier being 0 for mainland Britain, 1 for the islands around Britain and 2 for Ireland. This is followed by the hydrometric area number given in the second and third digits. Hydrometric areas are either integral river catchments having one or more outlets to the sea or tidal estuary, or, for convenience, they may include several contiguous river catchments having topographical similarity with separate tidal outlets. In Britain they are numbered from 1 to 97 in clockwise order around the coastline commencing in north east Scotland; Ireland has a unified numbering system from 1 to 40, commencing with the River Foyle catchment and circulating clockwise; not all Irish hydrometric areas, however, have an outlet directly on the coast.

The numbers and boundaries of the United Kingdom hydrometric areas are shown in the frontispiece.

The practice followed in the *Surface Water: United Kingdom* publications of using the fourth digit to denote certain characteristics of a gauging station, or of its flow record, has been discontinued. Normally this function is now performed by the station description (see below).

The fourth, fifth and sixth digits comprise the number, usually allocated chronologically, of the gauging station within the hydrometric area.

Where the leading digit, or digits, are zero they may be omitted giving rise to apparent four or five digit reference numbers.

Measuring Authority

An abbreviation referencing the organisation responsible for the operation of the gauging station. A list of measuring authority codes together with the corresponding names and addresses for all organisations currently contributing data to the surface water archive appears on pages 166 and 167.

Grid Reference

Standard two-letter and six figure map reference using the National Grid in Great Britain and the Irish Grid in Northern Ireland. (The Irish Grid has only one prefix letter but it is common practice to precede it with the letter I to make the identification clear).

Catchment Area

The surface catchment area in the horizontal plane of the gauging station in square kilometres. There are a few gauging stations where, because of geological considerations, the groundwater catchment area differs appreciably from the surface water catchment area and, in consequence, the baseflow, whether augmented or diminished, may cause the runoff value to appear anomalous.

First Year

The year in which the station started producing daily mean flow data, usually the first year for which data are held on the surface water archive. Earlier data, often of a sporadic nature, or of poorer quality, may occasionally be available from the measuring authorities or other sources.

Level of Station

The level of the station is, generally, the level of the gauge zero in metres above Ordnance Datum, or above Malin Head Datum for stations in Northern Ireland. Although gauge zero is usually closely related to zero discharge, it is the practice in some areas for an arbitrary height, typically one metre, to be added to the level of the lowest crest of a measuring structure to avoid the possibility of false recording of negative values by some digital recorders.

Maximum Altitude

The level to the nearest metre of the highest point in the catchment area.

Table of daily mean gauged (or naturalised) discharges

The mean flow in cubic metres per second (cumecs) in a water-day, normally 0900 am to 0900 am. The naturalised discharge is the gauged discharge adjusted to take account of net abstractions and discharges upstream of the gauging station.

Peak Flow: The highest flow in cubic metres per second for each month. The day of peak generally refers to the water-day but the calendar day is also used, particularly in Scotland. Normally the peak flow corresponds to the highest fifteen minute flow where water levels are recorded digitally, or the highest instantaneous flow associated with maximum stage where analogue recorders are used.

Runoff: The notional depth of water in millimetres over the catchment equivalent to the mean flow for

the month as measured at the gauging station. It is computed using the relationship:

$$\text{Runoff in mm} = \frac{\text{Average Flow in Cumecs} \times 86.4 \times n}{\text{Catchment Area (km}^2\text{)}}$$

where n is the number of days in the month.

The runoff total is rounded to the nearest millimetre.

Rainfall: The rainfall over the catchment in millimetres for each month. It is derived by first obtaining the long-period (1941–70) average annual rainfall for each catchment. Then, for each of a selected number of raingauges chosen to represent the catchment, the monthly rainfall is expressed as a percentage of its annual average rainfall. The percentage values of rainfall for each raingauge are summed and their mean obtained to give a catchment percentage value for the month, which is then converted to monthly mean rainfall (mm). Accuracy therefore depends largely on the reliability of the assessment of the areal annual average and on the adequacy of the network of raingauges used to represent an area.

Statistics of monthly data for previous record

Only complete monthly records are used in the derivation of the average, low and high values of river flow, runoff and rainfall. The rainfall and runoff statistics are normally directly comparable but full equivalence will not obtain where the pattern of missing data differs between the archived rainfall and runoff data sets.

Where applicable, a guide to the amount of missing data is given following the section heading.

Summary statistics

Current year flow statistics are tabulated alongside the corresponding values for the previous record. Where appropriate, the current year figures are expressed as a percentage of the preceding average.

Mean Flow: The average of all available daily mean flows during the term indicated.

Lowest Daily Mean: The value and date of occurrence of the lowest mean flow in cubic metres per second in a water-day during the term indicated. In a record in which the value recurs, the date is that of the last occasion.

It should be emphasised that river flow measurement tends to become more imprecise at very low discharges. Minimal velocities, heavy weed growth and the insensitivity of stage-discharge relations combine with difficulties of the accurate measurement of limited water depths to reduce the accuracy of computed flows.

The reliability of both the lowest daily mean flow and the 95 percentile flows (see below) as representative measures of low flow must be considered carefully and the values used with caution in view of the increasing proportional variability between the natural flow and the artificial influences, such as abstractions, discharges, and storage changes as the river flow diminishes.

Peak: The peak flow in cubic metres per second during the term indicated. The date of occurrence, normally the water-day, is also indicated. Generally, the peak flows are derived from the record of monthly instantaneous maximum flows stored on the surface water archive. As a result of particular flow-measurement difficulties in the flood range this peak flow series is often incomplete. Consequently, in some cases, the peak flow from the previous period of record has been abstracted from Volume IV of the Flood Studies Report¹. Reference to this report should be made to check for historical flood events which may exceed the peak falling within the gauged flow record.

10 percentile: The flow in cubic metres per second which was equalled or exceeded for 10 per cent of the specified term – a high flow parameter which, when compared with the mean may give a measure of the variability or ‘flashiness’ of the flow regime. The 10 percentile is computed using daily flow data only for those years with ten days, or less, missing on the surface water archive.

50 Percentile: The flow in cubic metres per second which was equalled or exceeded for 50 per cent of the specified term – the median value. The same conditions for completeness of the annual records apply as for the 10 percentile flow.

95 Percentile: The flow in cubic metres per second which was equalled or exceeded for 95 per cent of the specified term – a significant low flow parameter relevant in the assessment of river water quality consent conditions. The same conditions for completeness of the annual records apply as for the 10 percentile flow.

Factors affecting flow regime

An indication of the various types of abstractions from, and discharges to, the river operating within the catchment which alter the natural flow is given by a standard set of abbreviated descriptions. In

¹ Flood Studies Report 1975. Natural Environment Research Council (5 vols)

Part (ii) – the monthly flow data – each description is shortened to a code letter. An explanation of the abbreviated descriptions and the code letters is given below. With the exception of the induced loss in surface flow resulting from underlying

groundwater abstraction, these codes and descriptions refer to quantifiable variations and do not include the progressive, and difficult to measure, modifications in the regime related to land-use changes.

CODE EXPLANATION

ABBREVIATED DESCRIPTION

N Natural, i.e., there are no abstractions and discharges or the variation due to them is considered so limited that the gauged flow is within 10% of the natural flow at, or in excess of, the 95 percentile flow.

Natural within 10% at the 95 percentile flow.

Storage or impounding reservoir. Natural river flows will be effected by water stored in a reservoir situated in, and supplied from, the catchment above the gauging station;

Reservoirs in catchment.

Regulated river. Under certain flow conditions the river will be augmented from surface water and/or groundwater storage upstream of the gauging station.

Augmentation from surface water and/or groundwater.

Public water supplies. Natural river flows are reduced by the quantity abstracted from a reservoir or by a river intake if the water is conveyed outside the gauging station's catchment area.

Abstraction for public water supply.

Groundwater abstraction. Natural river flow may be reduced or augmented by groundwater abstraction or recharge. This category includes catchments where mine-water discharges influence the flow regime.

Flows influenced by groundwater abstraction and/or recharge.

Effluent return. Outflows from sewage treatment works will augment the river flow if the effluents originate from outside the catchment.

Augmentation from effluent returns.

Industrial and agricultural abstractions. Direct industrial and agricultural abstractions from surface water and from groundwater may reduce the natural river flow.

Flow reduced by industrial and/or agricultural abstraction.

Hydro-electric power. The river flow is regulated to suit the need for power generation.

Regulation for HEP.

Except for a small set of gauging stations for which the net variation, i.e. the sum of abstractions and discharges, is assessed in order to derive the 'naturalised' flow from the gauged flow, the record of individual abstractions, discharges and changes in storage as indicated in the code above is not held centrally.

included together with any factors limiting the availability or accuracy of the associated river flow record.

Station description

A concise description of the gauging station. When appropriate, details of the station history are

Comment

A summary of any important factors influencing the accuracy of the current year's flow data specifically; for instance, the reconstruction of a gauging station or the use of extrapolated stage-discharge relations during periods of very low or very high flows.

003003 Oykel at Easter Turnaig

1981

Measuring authority HRPB
First year 1977

Grid reference NC 403001
Level stn (m OD) 15.62

Catchment area (sq km): 330.7
Max alt. (m OD) 998

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	62 780	12 970	2 882	3 010	8 122	1 860	8 672	2 317	1 166	15 060	27 050	29 920
2	245 500	39 270	3 578	2 676	5 904	1 934	5 801	1 901	1 078	74 200	33 100	34 380
3	48 800	34 160	2 317	2 423	14 020	3 071	3 911	1 671	1 011	143 300	50 290	139 800
4	15 160	14 070	2 958	2 174	6 691	4 892	2 873	1 463	1 006	49 890	29 030	31 170
5	12 220	152 600	2 582	2 057	3 936	4 781	2 185	1 454	1 181	14 470	10 510	26 260
6	9 940	104 200	2 774	1 828	3 660	3 842	2 733	1 396	1 020	16 810	6 493	18 690
7	68 030	101 600	33 230	2 725	3 332	3 201	4 724	1 232	1 005	30 190	4 824	7 895
8	45 110	35 240	30 740	3 529	3 149	19 870	3 921	1 223	0 994	16 600	4 082	5 629
9	25 530	15 440	28 770	2 367	3 036	35 170	2 688	1 243	1 169	35 990	105 600	4 647
10	12 420	9 080	38 430	1 975	2 744	27 990	2 027	1 302	1 478	108 600	150 700	5 131
11	40 770	17 720	48 670	2 007	2 277	11 800	3 108	1 927	1 331	81 030	41 850	5 841
12	14 030	28 910	20 040	2 347	1 792	5 844	2 681	9 185	1 131	100 300	28 570	12 070
13	75 510	12 610	9 443	1 787	1 432	7 524	2 386	8 423	1 021	28 880	42 690	13 930
14	44 560	8 819	7 056	1 390	1 209	7 588	7 605	3 881	2 031	40 750	17 960	11 290
15	11 370	11 310	8 958	1 177	1 036	8 974	6 985	6 349	6 199	50 430	17 520	8 090
16	6 899	6 172	12 580	1 077	0 920	19 420	15 580	4 695	3 198	30 530	15 350	6 688
17	5 508	4 491	27 680	1 007	0 860	11 780	21 800	14 490	8 429	12 290	27 850	6 660
18	24 500	3 317	28 250	0 960	0 744	5 541	7 813	15 890	18 470	23 640	35 440	4 971
19	26 170	3 181	25 230	0 901	0 698	5 687	7 613	32 340	17 320	38 190	42 770	5 178
20	38 760	2 642	11 430	0 763	0 695	4 626	9 813	12 570	320 300	49 080	85 870	11 400
21	98 810	2 404	9 855	0 733	0 675	3 166	4 760	10 510	144 600	31 630	67 820	8 657
22	37 100	1 948	5 874	0 689	0 701	2 370	14 500	16 820	74 930	12 590	113 200	6 038
23	28 610	1 825	7 869	0 689	0 681	1 969	13 130	6 391	26 330	18 620	40 270	4 304
24	39 090	2 520	41 480	0 859	4 254	1 903	6 023	6 973	10 990	25 090	20 150	3 150
25	23 580	2 891	52 540	1 016	5 322	1 829	4 176	4 086	6 622	10 640	32 590	4 479
26	103 800	2 272	23 570	0 979	3 608	1 511	4 140	3 045	81 180	9 889	215 600	6 655
27	20 990	1 759	11 990	1 838	9 574	1 405	4 777	2 742	84 100	12 950	60 460	5 422
28	9 481	1 847	9 088	12 980	8 680	1 252	10 490	2 254	77 290	15 890	34 850	4 599
29	8 279		6 290	103 800	4 576	1 591	11 750	1 901	55 480	38 600	89 230	4 511
30	8 589		4 423	22 170	2 837	6 679	4 708	1 590	24 150	34 260	49 610	26 890
31	6 704		3 596		2 197		3 103	1 338		34 350		38 650
Average	39 180	22 610	16 750	6 124	3 528	7 302	6 653	5 826	31 870	38 220	49 380	16 220
Lowest	5 508	1 759	2 317	0 689	0 675	1 252	2 027	1 223	0 994	9 889	4 082	3 150
Highest	245 500	152 600	52 540	103 800	14 020	35 170	21 800	32 340	320 300	143 300	215 600	139 800
Peak flow	483 300	466 500	80 920	208 300	23 640	49 660	31 670	55 160	423 400	255 200	407 700	234 100
Day of peak	2	5	8	29	27	8	22	19	20	12	26	3
Monthly total (million cu m)	104 90	54 70	44 85	15 87	9 45	18 93	17 82	15 60	82 61	102 40	128 00	43 45
Runoff (mm)	317	165	136	48	29	57	54	47	250	310	387	131
Rainfall (mm)	310	162	145	76	78	101	81	79	326	401	458	123

Statistics of monthly data for previous record (Nov 1977 to Dec 1980)

Mean flows	Avg	17 390	15 430	17 370	10 220	6 076	10 590	9 627	9 216	24 990	29 040	33 860	20 090
	Low	16 030	14 420	6 649	5 445	1 067	6 918	2 853	6 061	21 090	7 328	26 910	8 245
	(year)	1980	1979	1980	1980	1980	1978	1978	1978	1979	1979	1980	1977
	High	18 920	16 460	28 000	17 720	12 360	14 140	15 690	13 730	28 480	41 100	41 300	38 210
	(year)	1978	1978	1979	1979	1979	1980	1979	1980	1978	1980	1977	1980
Runoff	Avg	141	114	141	80	49	83	78	75	196	235	265	163
	Low	130	105	54	43	9	54	23	49	165	59	211	67
	High	153	120	227	139	100	111	127	111	223	333	374	309
Rainfall	Avg												
	Low												
	High												

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	20 250	16 970	119
Lowest yearly mean		16 370	1978
Highest yearly mean		17 880	1980
Lowest monthly mean	3 528	1 087	May 1980
Highest monthly mean	49 380	41 300	Nov 1977
Lowest daily mean	0 675	0 596	18 May 1980
Highest daily mean	320 300	362 200	5 Oct 1978
Peak	483 300	847 500	5 Oct 1978
10 %ile	49 270	40 920	120
50 %ile	7 268	9 419	77
95 %ile	1 003	1 453	69
Annual total (million cu m)	638 60	535 50	119
Annual runoff (mm)	1931	1619	119
Annual rainfall (mm)	2340		
[1941-70 rainfall average (mm)]			

Factors affecting flow regime

● Natural to within 10% at 95 percentile flow

Station description

Velocity-area station Flow contained under cableway up to 3.8 m

008006 Spey at Boat o Brig

1981

Measuring authority: NERPB
First year: 1952

Grid reference: NJ 318518
Level stn. (m OD) 43.12

Catchment area (sq km): 2861.2
Max alt. (m OD) 1309

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	137.200	98.380	39.470	56.750	32.470	24.870	27.120	31.760	16.890	113.500	85.320	129.600
2	254.100	127.300	44.810	51.770	30.080	24.970	27.270	28.890	16.690	407.900	102.600	135.400
3	225.700	110.800	38.260	48.550	33.170	25.470	29.920	27.050	16.510	535.100	91.960	176.200
4	169.400	89.350	36.560	45.400	50.490	25.160	29.720	25.710	16.610	454.300	109.100	185.500
5	125.800	82.810	35.010	45.760	41.790	25.760	27.210	25.660	17.370	279.400	85.940	115.900
6	104.300	127.000	35.490	43.590	34.130	27.340	26.820	25.530	17.320	182.100	68.270	94.270
7	117.200	120.700	87.970	40.830	30.960	27.390	28.760	25.300	17.140	147.200	57.820	78.390
8	237.500	140.700	162.200	38.650	32.770	27.030	29.920	24.610	16.630	120.900	51.090	67.010
9	201.700	111.800	102.400	36.720	32.900	72.020	29.480	23.260	16.120	208.600	48.930	59.140
10	132.000	86.660	96.720	36.290	32.940	111.700	29.480	22.180	16.320	200.200	48.840	53.060
11	121.100	71.220	121.000	37.340	32.840	66.890	29.040	21.480	18.180	178.000	54.540	47.080
12	124.400	69.650	106.800	40.790	32.190	50.890	27.940	21.090	23.720	210.400	57.730	38.770
13	108.800	76.240	84.540	39.140	30.980	44.490	27.740	20.670	23.510	172.900	56.990	36.280
14	211.300	65.550	85.430	35.990	29.520	43.860	26.760	20.330	21.850	117.400	57.630	33.850
15	131.200	58.970	73.150	33.950	28.100	41.590	25.550	20.300	22.700	92.640	52.490	32.670
16	94.200	54.820	64.440	32.510	26.780	38.910	32.780	21.350	23.910	81.010	59.580	32.670
17	83.340	50.780	59.450	31.470	25.940	45.050	45.840	20.950	24.230	73.150	56.040	33.850
18	78.960	48.730	61.030	30.510	25.130	52.320	57.690	20.490	58.890	69.570	65.700	33.850
19	74.290	44.670	55.360	29.750	24.440	44.750	46.260	22.700	84.000	109.800	59.620	33.850
20	72.110	44.840	54.790	28.880	23.990	44.110	37.440	32.970	265.200	81.860	164.700	33.850
21	192.400	40.650	54.570	27.880	24.360	41.650	34.660	31.310	179.300	162.000	155.500	33.850
22	208.900	40.210	49.150	27.800	24.490	36.090	96.870	26.090	140.100	120.700	179.700	32.670
23	191.100	39.320	46.300	27.730	24.640	37.610	153.100	23.430	105.100	87.810	175.200	32.670
24	169.700	38.280	59.390	27.730	25.330	31.290	128.900	21.620	117.100	88.590	133.900	29.220
25	124.700	35.800	170.000	27.870	25.870	33.990	78.660	20.190	101.200	75.640	97.170	32.670
26	177.200	35.690	168.700	27.980	34.020	37.130	57.840	19.410	183.500	65.240	233.800	28.110
27	158.900	35.350	104.500	27.560	34.390	43.000	46.060	19.000	216.500	60.460	254.100	29.220
28	119.600	37.650	106.600	29.310	28.660	35.500	42.080	18.560	163.700	57.110	186.800	29.220
29	117.800		103.600	29.150	27.750	30.940	40.860	18.160	122.200	65.590	135.700	29.220
30	122.500		77.100	32.280	25.820	28.480	37.480	17.650	91.710	68.380	193.600	32.670
31	111.700		63.160		25.010		34.170	17.280		84.100		97.170
Average	145.000	70.850	78.970	35.660	30.050	40.490	44.950	23.060	71.140	153.900	106.000	59.930
Lowest	72.110	35.350	35.010	27.560	23.990	24.870	25.550	17.280	16.120	57.110	48.840	28.110
Highest	254.100	140.700	170.000	56.750	50.490	111.200	153.100	32.970	265.200	535.100	254.100	185.500
Peak flow	328.600	152.100	214.200	59.510	55.200	193.200	173.700	35.870	377.900	723.600	332.000	233.700
Day of peak	2	2	25	1	4	9	23	20	20	2	26	4
Monthly total (million cu m)	388.40	171.40	211.50	92.44	80.48	105.00	120.40	61.77	184.40	412.30	274.80	160.50
Runoff (mm)	136	60	74	32	28	37	42	22	64	144	96	56
Rainfall (mm)	131	56	84	20	47	81	86	30	157	205	149	60

Statistics of monthly data for previous record (Oct 1952 to Dec 1980)

Mean flows	Avg	80.710	71.170	72.050	69.800	58.950	41.850	41.440	51.090	46.900	64.130	74.390	87.330
	Low	41.080	26.470	35.790	33.600	26.900	17.920	18.060	11.310	14.090	13.340	30.140	38.760
	(year)	1979	1963	1964	1974	1960	1961	1976	1955	1972	1972	1958	1976
	High	142.900	159.100	145.200	135.200	103.500	103.000	79.860	119.600	105.400	116.700	117.600	198.700
	(year)	1974	1962	1978	1979	1968	1966	1980	1956	1965	1954	1977	1954
Runoff	Avg	76	61	67	63	55	38	39	48	42	60	67	87
	Low	38	22	34	30	25	16	17	11	13	12	27	36
	High	134	135	136	122	97	93	75	112	95	109	107	186
Rainfall	Avg	102	71	77	66	78	75	91	99	89	121	107	113
	Low	38	26	29	19	28	30	21	19	21	30	12	11
	High	183	123	179	128	146	181	158	188	168	335	199	211

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre 1981
Mean flow (m ³ s ⁻¹)	71.770	63.310	113
Lowest yearly mean		44.220	1972
Highest yearly mean		87.810	1954
Lowest monthly mean	23.060	11.310	Aug 1955
Highest monthly mean	153.900	198.700	Dec 1954
Lowest daily mean	16.120	9.311	16 Aug 1955
Highest daily mean	535.100	1089.000	17 Aug 1970
Peak	723.600	1675.000	17 Aug 1970
10 %ile	163.800	117.200	140
50 %ile	44.850	48.800	92
95 %ile	20.260	19.700	103
Annual total (million cu m)	2263.00	1998.00	113
Annual runoff (mm)	791	698	113
Annual rainfall (mm)	1106	1089	102
[1941-70 rainfall average (mm)]		1168]	

Factors affecting flow regime

● Regulation for HEP

Comment

Due to the effects of ice, river flows for the period 12th to 30th December are estimated.

Station description

Velocity-area station. 399 sq km Developed for hydro-electric power production

012001 Dee at Woodend

1981

Measuring authority: NERPB
First year: 1929

Grid reference: NO 635956
Level stn (m OD): 70.49

Catchment area (sq km): 1370.0
Max alt (m OD): 1310

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	39 880	51 170	19 240	38 260	16 820	17 870	10 650	10 680	6 116	59 180	35 120	40 620
2	101 900	76 520	23 500	33 340	14 690	18 240	10 840	10 010	5 958	276 100	44 010	60 460
3	71 940	48 490	19 610	30 720	15 990	19 570	11 090	9 913	5 824	346 100	40 120	123 800
4	42 650	36 750	18 580	28 210	20 200	17 480	10 550	9 688	5 785	169 000	43 440	88 180
5	35 440	33 320	17 870	28 340	16 310	16 300	10 050	9 115	6 129	100 300	31 170	52 370
6	32 340	59 240	18 290	26 250	14 670	15 380	12 810	8 686	6 677	93 140	26 530	43 450
7	36 860	46 050	110 700	24 760	14 830	16 570	14 470	8 433	6 025	69 960	24 150	34 960
8	107 900	44 820	198 400	22 980	21 960	17 300	11 480	8 267	5 804	59 040	22 690	27 390
9	79 940	30 740	64 520	21 500	20 340	41 270	10 760	8 144	5 634	130 300	22 830	25 180
10	41 890	26 470	61 390	21 670	19 370	43 050	10 500	7 939	6 280	85 510	27 030	23 060
11	42 110	23 270	103 200	25 670	19 460	25 150	10 460	7 830	13 810	61 250	32 210	21 700
12	44 300	26 760	75 330	27 940	19 150	23 090	12 000	7 738	13 060	52 810	27 970	21 040
13	34 850	39 120	51 260	23 240	17 960	21 220	10 890	7 738	12 270	54 710	24 960	20 380
14	76 850	26 060	46 730	20 740	16 620	21 260	9 921	7 730	9 678	41 510	24 060	19 740
15	41 490	22 790	37 700	19 330	15 630	18 060	9 457	7 554	10 210	35 540	23 450	19 100
16	37 040	20 580	31 560	18 670	14 470	16 850	9 732	7 689	10 430	37 350	37 490	19 100
17	32 040	19 280	28 720	18 210	14 430	19 450	14 720	7 761	14 360	29 560	28 870	19 420
18	28 780	19 040	28 400	17 480	13 720	19 570	17 470	7 442	53 720	27 700	29 940	19 100
19	26 820	17 850	25 370	16 750	16 240	17 170	13 780	7 571	29 340	58 260	23 100	18 480
20	25 740	17 410	25 880	15 840	15 250	16 270	11 800	10 100	134 200	35 690	112 000	18 790
21	74 740	15 240	25 810	15 340	16 130	15 690	10 950	10 630	51 550	72 330	58 000	19 100
22	90 870	15 690	22 430	14 810	18 370	14 140	33 260	8 879	30 890	55 840	76 320	18 480
23	111 800	15 630	21 480	14 730	23 430	13 260	47 420	8 091	31 120	37 880	57 830	16 670
24	80 370	15 390	27 130	15 600	25 470	12 740	31 220	7 575	39 770	38 520	39 070	15 800
25	47 840	14 570	140 700	15 260	25 600	12 750	23 380	7 331	26 830	33 100	34 840	15 520
26	83 210	14 870	80 910	14 880	32 580	12 660	19 390	7 120	237 800	28 740	112 300	14 960
27	71 790	14 140	53 430	13 950	24 080	13 880	15 930	6 890	198 300	27 360	107 800	14 960
28	54 030	15 670	167 200	15 020	19 030	12 970	14 760	6 752	89 380	28 880	54 250	14 960
29	68 210		83 040	15 670	17 620	11 870	14 640	6 619	54 160	37 390	42 730	15 670
30	70 570		52 810	17 400	15 410	11 170	12 720	6 447	41 720	27 720	55 410	31 690
31	59 710		43 060		14 870		11 370	6 264		35 020		81 380
Average	57 710	28 820	55 620	21 080	18 410	18 410	15 110	8 149	38 760	72 780	43 970	31 460
Lowest	25 740	14 140	17 820	13 950	13 720	11 170	9 457	6 264	5 634	27 360	22 690	14 960
Highest	111 800	76 520	198 400	38 260	32 580	43 050	47 420	10 680	237 800	346 100	112 300	123 800
Peak flow	160 700	118 200	295 200	41 820	49 510	83 480	57 650	12 310	464 100	586 400	195 900	148 300
Day of peak	2	2	8	1	25	9	22	21	26	2	26	3
Monthly total (million cu m)	154.60	69.71	149.00	54.63	49.30	47.71	40.48	21.83	100.50	193.60	114.00	84.27
Runoff (mm)	113	51	109	40	36	35	30	16	73	141	83	62
Rainfall (mm)	90	56	95	22	66	66	79	22	193	182	103	97

Statistics of monthly data for previous record (Oct 1929 to Dec 1980)

Mean flows	Avg	47 260	40 670	41 240	44 950	35 510	22 030	18 750	22 600	25 120	37 440	46 600	49 220
	Low	15 450	13 420	15 160	11 370	12 130	7 342	7 765	5 228	6 491	6 798	15 020	22 020
	(year)	1940	1947	1973	1938	1946	1940	1976	1955	1972	1977	1958	1976
	High	127 800	90 110	88 680	113 300	77 100	56 080	36 710	63 860	71 820	96 690	107 200	108 400
	(year)	1937	1945	1977	1947	1951	1948	1958	1948	1930	1976	1951	1954
Runoff	Avg	92	72	81	85	69	42	37	44	48	73	88	96
	Low	30	24	30	22	24	14	15	10	12	13	28	43
	High	250	159	173	214	151	106	72	125	136	189	203	212
Rainfall	Avg	118	77	73	71	81	67	92	96	90	115	112	119
	Low	36	10	16	12	28	16	24	13	13	8	22	43
	High	374	148	149	196	179	160	206	185	277	267	260	282

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	34 230	35 930	95
Lowest yearly mean		24 190	1973 -
Highest yearly mean		45 340	1960
Lowest monthly mean	8 149	5 228	Aug 1955
Highest monthly mean	72 280	127 800	Oct 1937
Lowest daily mean	5 634	3 536	27 Aug 1976
Highest daily mean	346 100	648 500	24 Jan 1937
Peak	586 400	1133 000	24 Jan 1937
10 %ile	72 900	71 220	102
50 %ile	21 850	25 230	87
95 %ile	7 504	8 628	87
Annual total (million cu m)	1079.00	1134.00	95
Annual runoff (mm)	788	828	95
Annual rainfall (mm)	1071	1111	96
[1941-70 rainfall average (mm)]		1156]	

Factors affecting flow regime

● Natural to within 10% at 95 percentile flow

Comment
Due to the effects of ice, river flows for the period 8th to 29th December are estimated

Station description

Velocity-area station. The lowest flows prior to 1971 are considered to be of limited accuracy

015006 Tay at Ballathie

1981

Measuring authority: TRPB
First year: 1952

Grid reference: NO 147367
Level stn. (m OD) 25.29

Catchment area (sq km): 4587.1
Max alt. (m OD): 1214

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	339 600	216 900	115 500	224 100	65 150	72 200	53 120	43 680	39 480	297 600	295 400	310 400
2	522 600	269 200	193 600	194 500	62 430	73 940	55 060	42 800	38 850	397 400	322 400	291 000
3	474 200	276 400	140 900	169 800	61 450	85 300	56 670	43 330	38 090	472 500	344 600	317 600
4	420 800	253 900	130 800	130 700	65 970	74 140	46 180	46 780	40 910	387 600	337 100	264 600
5	347 000	741 400	112 700	122 100	62 230	80 850	48 390	48 700	44 850	312 400	283 200	220 900
6	316 600	291 000	121 100	138 300	65 970	82 590	58 880	48 690	45 060	270 300	250 700	226 500
7	297 400	316 900	410 600	135 900	72 320	85 620	64 710	49 210	43 230	267 400	234 500	241 400
8	399 000	337 500	734 800	119 300	91 550	127 300	59 310	47 850	42 250	251 600	210 500	177 700
9	324 200	291 800	396 900	146 600	76 370	147 900	57 630	48 350	41 740	373 200	206 400	153 500
10	298 800	260 500	458 600	107 400	69 630	143 800	58 550	49 500	50 590	336 800	201 700	137 400
11	287 300	251 500	447 500	105 200	60 760	110 800	61 160	49 180	77 220	308 200	217 800	117 900
12	285 000	267 600	375 300	96 850	55 920	100 200	67 270	48 900	61 820	271 100	203 500	88 980
13	248 100	270 500	313 600	83 680	54 820	111 400	64 150	46 820	56 320	225 600	198 700	91 110
14	334 700	243 600	271 200	82 770	54 370	133 900	61 050	45 510	52 620	224 300	154 100	136 300
15	280 900	216 800	245 700	81 230	53 640	116 900	58 780	43 230	55 950	195 700	163 600	127 800
16	254 200	194 900	225 600	78 700	55 000	104 500	58 610	44 240	54 120	184 800	207 100	131 600
17	231 500	168 100	204 100	76 570	67 740	97 300	61 300	44 960	86 950	155 500	244 700	125 200
18	223 200	149 400	191 200	75 430	52 750	91 450	63 380	51 890	279 200	146 600	259 200	103 800
19	215 700	155 900	179 900	74 110	58 360	87 550	57 270	58 590	173 600	208 300	229 900	100 700
20	199 600	159 900	174 400	78 460	60 470	82 910	55 860	73 170	399 500	168 700	523 200	88 270
21	241 900	169 500	189 100	76 730	70 700	77 130	54 590	58 240	259 900	164 800	400 200	107 800
22	305 100	150 000	161 400	73 990	87 790	72 920	63 080	56 800	220 700	148 700	417 100	107 500
23	321 500	147 200	169 700	73 260	107 200	64 210	77 890	49 680	234 400	140 600	354 900	106 400
24	300 200	123 100	172 100	74 810	118 900	62 190	69 440	53 300	271 900	128 200	312 900	95 220
25	241 500	117 800	427 700	65 790	110 300	53 840	65 580	45 850	231 900	123 400	286 400	76 630
26	268 200	110 200	329 200	63 160	112 900	51 270	67 520	43 330	598 600	135 800	408 500	69 180
27	280 000	95 920	282 800	64 870	97 650	48 120	59 990	42 370	857 600	153 000	448 300	81 530
28	265 300	92 440	428 600	64 250	78 480	47 270	56 520	41 760	490 300	196 000	353 300	81 710
29	255 600		346 400	64 240	69 100	50 140	55 430	40 870	344 400	231 800	310 700	94 350
30	253 900		284 800	64 500	62 930	53 870	47 370	39 750	299 600	224 800	333 500	132 200
31	230 900		262 800		59 790		44 640	39 530		248 500		230 700
Average	298 900	208 600	274 400	100 200	72 340	86 380	58 850	47 960	184 400	237 100	290 300	149 500
Lowest	199 600	92 440	112 700	63 160	52 750	47 270	44 640	39 530	38 090	123 400	154 100	69 180
Highest	522 600	337 500	734 800	224 100	118 900	147 900	77 890	73 170	857 600	472 500	523 200	317 600
Peak flow	658 300	428 700	951 400	243 300	159 000	171 200	80 880	78 100	1134 000	517 900	635 300	351 300
Day of peak	2	7	8	1	25	8	23	20	27	3	20	3
Monthly total (million cu m)	800 50	504 60	735 00	259 70	193 80	223 90	157 60	128 50	477 90	635 10	752 40	400 50
Runoff (mm)	175	110	160	57	42	49	34	28	104	138	164	87
Rainfall (mm)	133	105	163	17	99	72	78	23	266	173	196	88

Statistics of monthly data for previous record (Oct 1952 to Dec 1980)

Mean flows	Avg	225 100	200 600	191 800	142 900	118 300	81 420	68 780	84 590	114 600	173 300	202 700	237 200
	Low	92 910	52 560	69 380	75 210	45 500	42 080	37 470	14 690	40 650	39 680	89 160	112 800
	(year)	1963	1963	1953	1974	1980	1957	1977	1955	1955	1972	1972	1952
	High	515 800	353 700	424 800	231 200	186 800	190 400	111 500	161 100	195 900	323 400	398 700	491 400
	(year)	1974	1962	1967	1960	1964	1966	1970	1956	1980	1967	1954	1954
Runoff	Avg	131	107	112	81	69	46	40	49	65	101	115	139
	Low	54	28	41	43	27	24	22	9	23	23	50	66
	High	301	187	248	131	109	108	65	94	111	189	225	287
Rainfall	Avg	151	102	111	76	98	87	98	107	122	142	140	164
	Low	33	31	39	10	26	52	27	14	11	63	38	64
	High	393	182	224	150	200	181	144	183	193	254	281	271

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre 1981
Mean flow (m ³ s ⁻¹)	167 100	153 300	109
Lowest yearly mean		107 300	1955
Highest yearly mean		207 900	1954
Lowest monthly mean	47 960 Aug	14 690 Aug 1955	
Highest monthly mean	298 900 Jan	515 800 Jan 1974	
Lowest daily mean	38 090 3 Sep	11 460 6 Aug 1955	
Highest daily mean	857 600 27 Sep	1223 000 27 Nov 1954	
Peak	1134 000 27 Sep	1570 000 30 Jan 1974	
10 %ile	331 400	287 400	115
50 %ile	123 500	125 600	98
95 %ile	44 290	44 440	100
Annual total (million cu m)	5270 00	4838 00	109
Annual runoff (mm)	1149	1055	109
Annual rainfall (mm)	1413	1398	101
{1941-70 rainfall average (mm)}		1442}	

Factors affecting flow regime

● Regulation for HEP.

Station description

Velocity-area station 1980 sq km developed for hydro-electric power production, 73 sq km for water supply purposes.

019001 Almond at Craighall

1981

Measuring authority FRPB Grid reference NT 165752 Catchment area (sq km) 369.0
First year 1957 Level stn (m OD) 22.90 Max alt (m OD) 518

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	14 410	3 066	2 551	2 898	1 172	1 911	1 014	0 904	0 936	67 080	27 740	10 100
2	29 710	24 280	9 587	2 647	1 173	5 733	1 394	0 897	0 928	99 080	19 610	7 227
3	21 270	25 970	4 799	2 447	2 301	2 996	1 150	0 989	0 906	32 570	17 890	7 537
4	9 770	11 490	3 545	2 195	2 958	2 026	0 983	1 035	0 985	17 870	12 020	13 010
5	6 980	8 137	3 486	1 948	1 824	2 493	1 146	0 925	1 864	11 030	7 556	7 981
6	5 921	8 246	25 180	1 988	1 887	2 010	1 270	0 876	1 201	8 020	5 791	6 330
7	7 385	12 540	39 340	1 971	2 268	3 018	1 115	0 866	0 986	7 668	4 687	5 324
8	10 950	8 258	15 870	1 814	1 880	13 140	1 003	0 885	0 997	18 720	4 058	4 144
9	11 430	5 454	9 958	1 717	1 689	9 025	0 996	0 898	0 952	28 990	3 851	3 054
10	6 301	4 195	46 300	1 645	1 624	3 574	1 555	0 936	1 000	13 360	5 439	2 583
11	5 432	3 641	17 130	1 665	1 615	5 757	1 885	0 949	1 076	7 687	12 880	2 513
12	5 895	3 518	11 760	1 800	1 532	3 551	1 222	0 934	0 926	5 444	6 674	2 629
13	4 629	3 104	8 496	1 643	1 518	12 260	1 155	0 929	0 888	4 359	4 699	2 577
14	10 930	2 778	8 767	1 542	1 485	9 990	1 120	0 888	1 591	3 860	3 887	2 618
15	5 663	2 647	7 765	1 485	1 391	4 204	1 052	0 838	2 170	3 320	4 121	2 206
16	4 079	2 363	5 662	1 459	1 958	2 817	1 074	0 832	1 336	2 932	5 268	3 516
17	4 709	2 236	4 759	1 435	2 004	2 279	1 748	0 974	2 375	2 635	9 721	5 488
18	10 410	2 076	4 498	1 379	1 702	1 981	1 295	0 958	5 197	2 825	16 370	6 703
19	12 400	1 977	3 945	1 378	1 626	1 885	1 059	1 168	3 820	3 860	11 340	5 703
20	7 963	1 996	3 970	1 337	1 761	1 653	1 042	1 245	34 720	3 127	29 300	3 813
21	20 040	1 939	8 989	1 320	1 661	1 447	1 464	0 936	9 520	2 600	14 710	4 001
22	9 974	1 837	9 178	1 306	1 614	1 282	4 785	0 845	3 908	2 299	11 840	2 733
23	7 608	1 752	8 699	1 319	1 563	1 310	5 146	0 872	19 270	2 178	12 660	2 303
24	6 370	1 641	9 288	2 206	1 516	1 415	2 349	0 897	13 570	2 307	7 201	2 117
25	5 025	1 604	16 800	2 184	2 296	1 292	1 534	0 940	5 234	2 255	7 388	2 438
26	5 809	1 606	9 668	2 135	2 398	1 363	1 298	0 943	34 960	2 345	23 730	2 506
27	5 209	1 637	6 177	1 747	2 329	1 224	1 179	0 896	22 950	9 546	21 550	1 974
28	4 470	2 276	5 122	1 667	2 082	1 149	1 344	0 878	15 000	11 360	13 010	2 210
29	4 145	4 269	1 525	1 575	1 838	1 137	1 174	0 848	7 019	43 150	9 926	8 884
30	3 656	3 583	1 465	1 465	1 604	1 127	1 059	0 833	4 468	24 610	19 510	14 190
31	3 781	3 286			2 054		1 023	0 755		21 640		13 960
Average	8 767	5 438	10 400	1 776	1 817	3 502	1 504	0 922	6 692	15 120	11 810	5 238
Lowest	3 281	1 604	2 551	1 306	1 172	1 127	0 983	0 755	0 888	2 178	3 851	1 974
Highest	29 710	25 970	46 300	2 898	2 958	13 140	5 146	1 245	34 960	99 080	29 300	14 190
Peak flow	37 170	66 330	81 770	3 005	4 835	29 310	8 822	1 556	68 890	180 500	53 160	18 660
Day of peak	2	2	10	1	25	13	22	19	26	2	20	31
Monthly total (million cu m)	23 48	13 16	27 86	4 60	4 87	9 08	4 03	2 47	17 35	40 50	30 62	14 03
Runoff (mm)	64	36	75	12	13	25	11	7	47	110	83	38
Rainfall (mm)	58	44	116	18	56	79	64	19	159	161	104	40

Statistics of monthly data for previous record (Jan 1957 to Dec 1980)

Mean flows	Avg	8 206	7 442	5 792	4 141	3 042	2 129	3 155	4 135	5 427	8 965	8 661
	Low	3 574	1 782	1 918	1 409	1 091	0 817	0 926	0 668	0 668	1 862	3 016
	(year)	1963	1963	1973	1974	1961	1960	1976	1959	1972	1972	1975
	High	15 810	13 740	14 300	8 374	11 170	8 572	8 434	12 680	14 920	21 660	16 280
	(year)	1975	1977	1979	1972	1968	1966	1966	1967	1967	1963	1974
Runoff	Avg	60	49	47	29	27	15	23	29	39	63	63
	Low	26	12	14	10	8	6	7	5	5	13	22
	High	115	90	104	59	81	60	61	89	108	152	118
Rainfall	Avg	75	59	56	52	62	60	86	81	82	88	78
	Low	28	18	22	8	16	24	20	14	23	41	21
	High	145	107	94	88	123	136	142	148	177	190	154

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	6 089	5 262	116
Lowest yearly mean		2 890	1973
Highest yearly mean		6 888	1979
Lowest monthly mean	0 922	0 668	Sep 1959
Highest monthly mean	15 120	21 660	Nov 1963
Lowest daily mean	0 755	0 241	9 Oct 1959
Highest daily mean	99 080	120 400	22 Nov 1969
Peak	180 500	180 600	31 Oct 1977
10 %ile	14 030	12 020	117
50 %ile	2 608	2 692	97
95 %ile	0 914	0 844	108
Annual total (million cu m)	192 00	166 10	116
Annual runoff (mm)	520	450	116
Annual rainfall (mm)	918	853	108
(1941-70 rainfall average (mm))		916]	

Factors affecting flow regime

- Abstraction for public water supplies
- Flow reduced by industrial and/or agricultural abstractions
- Augmentation from effluent returns

Station description
Velocity-area station

021009 Tweed at Norham

1981

Measuring authority: TWRP Grid reference: NT 898477 Catchment area (sq km): 4390 0
First year: 1959 Level stn. (m OD) 4.27 Max alt. (m OD) 839

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	129 800	51 670	45 000	79 440	47 770	37 750	23 030	25 570	13 590	287 100	84 980	174 400
2	157 700	67 670	326 400	72 150	38 480	78 520	23 140	24 370	14 070	961 600	167 600	128 800
3	189 100	218 600	186 700	64 050	37 630	80 840	22 600	23 070	13 760	489 400	102 600	112 500
4	130 800	122 200	111 900	58 300	55 660	51 880	22 410	22 870	12 850	277 500	111 700	179 300
5	105 000	92 880	87 650	54 810	43 820	59 370	21 690	22 440	12 440	198 900	78 320	139 900
6	94 210	88 300	126 900	53 210	39 130	63 140	22 390	21 480	12 430	162 600	66 020	113 600
7	82 850	80 310	424 700	50 230	38 190	68 850	25 420	20 910	12 920	145 200	58 820	97 370
8	93 320	76 160	358 500	47 590	47 700	99 380	23 270	20 690	12 750	166 200	53 790	81 520
9	107 700	65 490	189 800	44 170	49 110	158 100	21 040	21 320	12 980	465 300	49 890	66 380
10	84 010	59 360	216 700	41 440	40 990	95 920	19 490	20 460	12 870	291 900	53 090	61 300
11	73 280	54 180	190 700	41 680	38 310	165 700	21 170	19 150	12 770	187 300	74 460	58 040
12	76 520	56 890	138 500	44 690	35 070	123 300	58 920	18 560	15 220	142 600	67 240	55 180
13	65 420	74 780	111 200	42 770	32 570	97 410	37 660	18 680	14 480	115 300	53 950	54 080
14	83 790	56 860	97 950	38 670	30 460	130 700	28 170	18 590	13 490	95 140	48 030	53 020
15	80 410	51 050	88 790	36 440	26 730	83 900	24 530	17 790	14 290	80 080	45 310	51 340
16	60 780	47 730	76 180	34 960	28 130	66 680	23 170	16 870	17 700	68 730	52 810	49 830
17	64 180	44 230	68 850	33 740	43 480	57 920	22 260	16 460	14 760	61 050	50 140	48 350
18	65 190	42 210	66 480	32 280	31 280	51 470	24 520	16 370	18 570	55 440	52 990	48 600
19	82 960	40 020	61 990	31 460	29 610	47 480	22 680	16 800	26 750	68 010	51 310	45 210
20	67 900	39 490	73 850	30 920	31 150	44 160	20 710	20 090	155 700	59 760	117 900	44 040
21	144 400	38 470	117 700	30 400	57 600	40 110	20 500	21 100	82 430	51 160	93 670	43 440
22	164 300	36 830	129 900	29 990	45 250	36 680	96 380	17 900	37 120	46 080	91 310	43 040
23	114 100	35 350	131 300	29 420	43 830	34 040	309 600	16 580	27 780	42 560	332 400	42 030
24	95 290	33 650	238 600	33 830	46 410	34 090	129 900	15 770	150 800	41 310	194 600	49 600
25	81 830	32 030	326 800	45 430	43 240	32 800	70 310	15 260	74 210	39 640	127 900	47 030
26	79 580	32 070	202 700	59 970	39 240	31 610	51 390	15 010	216 500	36 940	116 100	42 660
27	77 880	31 040	145 400	65 390	53 090	30 910	41 360	15 010	360 200	36 350	220 300	41 260
28	68 870	34 880	143 100	98 620	55 330	29 410	35 820	14 410	183 900	35 490	151 100	44 080
29	63 860		126 300	110 400	44 940	27 680	33 070	14 100	101 700	60 590	120 900	92 220
30	59 430		100 700	80 110	37 460	26 260	29 500	13 830	83 290	76 720	214 400	184 500
31	55 590		86 180		34 100		27 070	13 680		74 130		238 900
Average	92 900	60 870	154 800	50 550	40 830	66 200	43 650	18 550	57 740	158 700	103 500	81 600
Lowest	55 590	31 040	45 000	29 420	26 730	26 260	19 490	13 680	12 430	35 490	45 310	41 260
Highest	169 100	218 600	424 700	110 400	57 600	165 700	309 600	25 570	360 200	961 600	332 400	238 900
Peak flow	234 400	322 400	598 300	143 900	78 270	268 400	408 300	26 330	551 200	1077 000	582 800	281 400
Day of peak	21	3	7	28	21	11	23	1	26	2	23	31
Monthly total (million cu m)	248 80	147 30	414 50	131 00	109 40	171 60	116 90	49 70	149 70	425 10	268 20	218 60
Runoff (mm)	57	34	94	30	25	39	27	11	34	97	61	50
Rainfall (mm)	50	46	138	39	79	80	95	21	143	145	106	69

Statistics of monthly data for previous record (Oct 1962 to Dec 1980)

Mean flows	Avg	114 700	102 400	100 400	66 280	56 630	34 820	28 950	42 820	53 910	75 140	110 000	110 800
	Low	50 320	37 180	26 290	25 180	17 950	15 550	15 920	9 883	10 990	10 180	24 710	40 700
	(year)	1973	1963	1973	1974	1980	1974	1976	1978	1972	1972	1973	1975
	High	204 000	173 300	236 400	142 200	153 300	53 990	67 680	116 500	125 800	178 300	271 700	197 900
	(year)	1975	1978	1963	1979	1967	1966	1985	1966	1965	1967	1963	1979
Runoff	Avg	70	57	61	39	35	21	18	26	32	46	65	68
	Low	31	20	16	15	11	9	10	6	6	6	15	25
	High	124	95	144	64	94	32	41	71	74	108	160	121
Rainfall	Avg	92	67	75	60	75	67	71	94	92	86	98	87
	Low	45	23	21	12	22	25	24	31	19	25	29	23
	High	158	125	138	84	181	129	140	188	164	163	220	175

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	77 710	74 820	104
Lowest yearly mean		33 910	1973
Highest yearly mean		102 400	1963
Lowest monthly mean	18 550	Aug 9 883	Aug 1976
Highest monthly mean	158 700	Oct 271 700	Nov 1963
Lowest daily mean	12 430	6 Sep 7 427	28 Aug 1976
Highest daily mean	961 600	2 Oct 1042 000	6 Mar 1963
Peak	1077 000	2 Oct 1463 000	31 Oct 1977
10 %ile	163 000	158 100	103
50 %ile	52 640	50 830	104
95 %ile	14 680	14 070	104
Annual total (million cu m)	2451 00	2355 00	104
Annual runoff (mm)	558	538	104
Annual rainfall (mm)	1011	964	105
[1941-70 rainfall average (mm)]		1039]	

Factors affecting flow regime

- Reservoir(s) in catchment
- Abstraction for public water supplies.

Station description
Velocity-area station

022001 Coquet at Morwick

1981

Measuring authority NWA
First year 1966

Grid reference NU 234044
Level stn (m OD) 5 25

Catchment area (sq km) 569 8
Max alt (m OD) 776

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	6 827	4 724	23 210	8 645	8 103	3 786	1 918	2 591	1 449	39 820	4 093	19 560
2	6 407	8 746	173 000	7 837	6 149	12 770	1 921	2 432	1 432	90 370	5 277	12 250
3	6 851	21 580	41 400	6 158	5 567	6 725	2 055	2 280	1 396	30 640	4 449	10 440
4	5 883	9 486	20 220	5 456	6 454	4 215	2 064	2 113	1 356	21 270	4 192	25 450
5	5 094	7 197	14 690	5 247	5 631	3 590	1 940	2 054	1 332	16 670	3 696	13 440
6	5 019	6 801	26 030	5 581	5 818	3 263	1 898	2 013	1 362	13 450	3 381	10 480
7	4 842	5 947	51 250	5 427	5 234	4 384	1 825	2 085	1 366	15 920	3 188	8 775
8	6 464	5 322	28 440	5 282	11 980	8 637	1 766	2 170	1 341	29 830	3 124	7 124
9	6 767	4 959	15 400	4 635	9 618	6 054	1 709	2 461	1 373	56 190	3 272	5 549
10	5 774	4 600	35 740	4 311	8 130	4 430	1 667	2 154	1 397	29 940	5 652	5 144
11	6 229	4 249	21 810	4 786	6 075	18 880	3 107	1 927	1 624	14 780	5 349	4 276
12	10 870	4 366	15 960	5 479	4 987	9 905	8 589	1 825	1 906	10 550	4 848	4 552
13	6 319	4 301	11 570	4 792	4 405	6 139	4 018	1 841	1 744	8 623	4 014	4 926
14	11 370	3 954	18 980	4 207	4 075	5 763	2 855	1 887	1 610	7 358	3 548	6 973
15	7 751	3 821	11 860	3 870	3 759	4 531	2 408	1 736	2 087	6 512	3 339	5 791
16	5 022	3 765	9 976	3 645	4 695	3 786	2 376	1 655	2 094	5 731	3 259	4 422
17	6 156	3 642	9 076	3 452	5 665	3 733	2 374	1 644	1 774	5 205	3 241	2 949
18	6 345	3 532	8 609	3 208	4 188	3 165	2 356	1 643	1 695	4 846	4 254	3 620
19	7 744	3 441	8 768	3 086	3 975	3 059	2 071	1 630	2 404	4 891	3 830	3 454
20	6 186	3 464	13 740	3 011	3 847	2 951	2 055	1 783	16 050	4 642	7 152	4 424
21	21 390	3 386	17 600	2 897	4 273	2 766	2 154	1 972	5 457	4 443	6 349	4 996
22	14 460	3 177	25 230	2 842	5 178	3 719	16 870	1 692	3 469	4 287	5 047	4 605
23	9 719	3 054	30 270	2 821	4 580	1 779	50 990	1 598	2 729	4 041	45 240	4 125
24	7 892	3 057	39 730	6 062	4 379	2 382	17 830	1 544	4 238	4 064	16 960	5 684
25	6 780	3 068	36 260	15 460	3 578	2 395	8 951	1 517	4 054	4 129	9 834	4 531
26	8 019	3 125	16 360	14 390	3 169	2 387	6 049	1 487	54 020	3 894	9 512	4 132
27	8 078	3 014	11 550	7 600	2 999	2 427	4 633	1 462	22 350	3 685	19 630	5 278
28	6 710	18 230	9 595	27 390	2 908	2 745	3 909	1 463	10 140	3 514	13 120	10 100
29	5 975	7 945	28 270	3 124	2 094	3 463	1 471	1 471	6 833	3 823	9 829	38 790
30	5 382	7 083	13 760	2 854	1 982	2 996	1 467	1 467	6 828	3 745	43 300	54 040
31	5 031	6 471		3 174		2 740	1 446		3 963			46 670
Average	7 528	5 643	24 770	7 654	5 115	4 781	5 534	1 840	5 567	14 870	8 733	11 180
Lowest	4 842	3 014	6 471	2 821	2 854	1 779	1 662	1 446	1 323	3 514	3 124	2 949
Highest	21 390	21 580	173 000	28 270	11 980	18 880	50 990	2 591	54 020	90 370	45 240	54 040
Peak flow	35 570	37 460	243 600	45 380	22 880	39 120	91 500	2 690	96 340	112 500	84 010	77 810
Day of peak	21	3	2	28	8	11	23	1	26	2	23	30
Monthly total (million cu m)	20 16	13 65	66 34	19 84	13 70	12 39	14 82	4 93	14 42	39 82	22 63	29 94
Runoff (mm)	35	24	116	35	24	22	26	9	25	70	40	53
Rainfall (mm)	38	41	144	55	61	60	95	18	119	111	82	82

Statistics of monthly data for previous record (Sep 1966 to Dec 1980)

Mean flows	Avg	15 380	14 520	12 740	7 753	6 136	3 506	3 065	3 681	4 193	7 777	10 730	12 960
	Low	5 421	2 673	1 730	2 928	2 155	1 141	1 549	1 651	1 418	1 083	1 926	4 563
	(year)	1973	1973	1973	1974	1974	1970	1976	1976	1972	1972	1973	1971
	High	27 680	26 350	31 390	13 470	14 190	6 355	7 969	9 386	14 170	26 860	21 860	33 340
	(year)	1969	1978	1979	1979	1969	1969	1968	1971	1968	1976	1967	1978
Runoff	Avg	72	62	60	35	29	16	14	17	19	37	49	61
	Low	25	11	8	13	10	5	7	8	6	5	9	21
	High	130	112	148	61	67	29	37	44	64	26	99	157
Rainfall	Avg	89	67	77	51	68	55	66	74	72	75	84	83
	Low	45	15	18	8	18	8	19	28	15	19	19	31
	High	140	120	141	76	127	129	101	132	215	176	165	251

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	8 645	8 515	102
Lowest yearly mean		3 716	1973
Highest yearly mean		11 380	1969
Lowest monthly mean	1 840	1 083	Aug 1977
Highest monthly mean	24 770	33 340	Dec 1978
Lowest daily mean	1 373	9 Sep	0 721 20 Jun 1970
Highest daily mean	173 000	2 Mar	147 800 5 Nov 1967
Peak	243 600	2 Mar	218 000 27 Dec 1978
10 %ile	18 700	18 240	103
50 %ile	4 605	4 804	96
95 %ile	1 582	1 304	121
Annual total (million cu m)	272 60	268 70	101
Annual runoff (mm)	478	472	101
Annual rainfall (mm)	906	861	105
[1941-70 rainfall average (mm)]		880]	

Factors affecting flow regime

● Natural to within 10% at 95 percentile flow

Station description

Velocity area station. Informal flat V weir installed 1976

023006 South Tyne at Featherstone**1981**Measuring authority: NWA
First year: 1966Grid reference: NY 672611
Level stn. (m OD) 131.70Catchment area (sq km): 321.9
Max alt. (m OD): 893**Daily mean gauged discharges (cubic metres per second)**

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	36 090	4 254	3 244	4 371	7 653	2 918	2 434	2 254	1 325	122 400	44 540	12 750
2	72 590	76 940	13 240	4 088	4 994	15 630	2 346	2 173	1 310	67 140	17 540	9 842
3	31 850	27 200	6 442	3 683	28 580	5 608	2 175	1 985	1 265	23 280	12 150	14 620
4	12 080	11 320	4 567	3 382	15 920	3 838	1 844	1 954	1 212	16 230	9 452	28 190
5	8 052	13 760	4 878	3 202	6 884	4 346	4 127	1 870	1 174	19 410	6 499	9 964
6	7 022	13 600	42 080	3 060	6 336	6 083	4 585	1 769	1 207	13 000	5 455	7 753
7	9 587	9 583	59 700	3 173	5 483	6 235	2 987	1 832	1 216	27 710	4 867	6 413
8	27 930	7 267	26 080	3 100	4 896	9 214	2 248	2 287	1 203	58 150	4 398	4 541
9	27 280	6 070	10 810	2 930	4 119	9 866	1 960	2 350	1 185	79 170	4 114	3 651
10	8 578	5 021	52 390	2 712	4 298	10 070	1 749	1 903	1 168	21 240	20 390	3 085
11	7 617	4 332	30 070	2 569	3 697	43 090	2 063	1 713	2 021	11 040	33 910	2 915
12	13 280	4 802	16 110	3 441	3 087	9 384	2 162	1 665	1 921	8 342	9 470	2 679
13	27 080	4 897	9 744	9 229	2 719	15 970	1 924	1 679	1 561	7 400	6 996	3 074
14	45 600	3 923	12 470	4 938	2 517	21 540	1 734	1 722	1 381	6 280	5 938	3 185
15	10 110	3 641	7 646	3 354	2 534	7 010	1 682	1 637	3 151	5 396	5 808	3 102
16	7 524	3 721	6 049	2 859	5 311	5 140	7 021	1 565	2 233	4 945	7 406	2 650
17	15 830	3 384	5 385	2 542	3 356	4 662	9 874	1 504	2 139	4 518	25 370	2 228
18	13 930	3 031	9 033	2 338	3 140	4 129	4 919	1 798	8 330	4 179	26 840	2 238
19	12 720	2 874	21 280	2 208	3 352	4 417	5 799	17 280	44 370	6 216	13 800	2 407
20	7 938	2 896	13 580	2 147	5 694	3 868	25 690	9 824	21 090	5 141	25 740	3 380
21	44 910	2 700	44 520	2 091	6 272	3 193	11 310	3 929	6 642	4 605	12 760	3 192
22	18 780	2 381	20 870	2 050	4 658	2 811	38 180	2 827	10 210	4 023	10 740	2 815
23	11 730	2 341	67 770	2 023	5 115	2 615	33 480	2 314	33 090	3 632	62 290	2 586
24	10 470	2 252	38 450	2 019	4 428	2 627	13 750	2 054	29 220	5 956	11 890	2 576
25	7 858	2 288	40 150	2 466	3 397	2 597	6 515	1 955	16 090	6 515	29 020	2 532
26	11 050	2 165	17 940	3 415	13 680	2 544	5 235	1 781	67 880	7 064	94 630	2 491
27	8 390	2 166	10 210	3 955	23 800	2 419	4 094	1 569	33 220	25 710	35 840	2 385
28	6 439	2 319	7 456	10 230	7 571	2 246	3 430	1 460	29 760	21 490	16 620	2 477
29	5 596	5 835	39 840	4 327	2 088	2 992	2 992	1 415	19 690	16 930	18 120	5 085
30	5 084	5 148	31 270	3 317	2 084	2 601	2 601	1 379	14 780	11 470	51 460	11 730
31	4 605	4 506	3 029	3 029	3 029	2 398	2 398	1 334	10 150	10 150	15 070	15 070
Average	17 160	8 237	19 920	5 621	6 586	7 274	6 881	2 669	12 030	20 280	21 140	5 858
Lowest	4 605	2 165	3 744	2 019	2 517	2 084	1 682	1 334	1 168	3 632	4 114	2 228
Highest	72 590	76 940	67 770	39 840	28 580	43 090	38 180	17 280	67 880	122 400	94 630	28 190
Peak flow	115 700	229 000	200 600	55 590	94 360	93 340	93 340	32 280	223 900	238 900	275 200	70 730
Day of peak	2	2	23	29	27	11	22	19	26	1	26	3
Monthly total (million cu m)	45.97	19.93	53.36	14.57	17.64	18.86	18.43	7.15	31.19	54.31	54.78	15.69
Runoff (mm)	143	62	166	45	55	59	57	22	97	169	170	49
Rainfall (mm)	119	63	176	68	99	102	107	55	189	193	192	62

Statistics of monthly data for previous record (Oct 1966 to Dec 1980—incomplete or missing months total 0.2 years)

Mean flows	Avg	14 950	12 130	12 620	9 012	6 255	4 770	4 637	6 472	9 722	11 690	15 420	14 670
Low	10 540	5 122	5 860	1 850	1 311	1 465	1 329	0 960	1 477	1 181	6 793	5 110	5 110
(year)	1970	1968	1975	1974	1980	1978	1976	1976	1972	1972	1968	1971	1971
High	25 510	19 760	30 210	16 210	12 250	12 740	9 385	13 140	17 780	30 330	22 890	28 810	28 810
(year)	1975	1974	1979	1979	1967	1980	1968	1967	1968	1967	1974	1974	1974
Runoff	Avg	124	92	105	73	52	38	39	53	74	97	124	122
	Low	88	40	49	15	11	12	11	8	12	10	55	43
	High	212	148	251	131	102	103	78	109	143	252	184	240
Rainfall	Avg	127	88	110	73	84	87	96	107	124	126	140	124
	Low	74	31	44	11	40	44	43	25	40	27	63	42
	High	213	166	199	133	178	215	141	182	239	331	240	215

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	11 160	10 140	110
Lowest yearly mean		7 630	1971
Highest yearly mean		12 920	1979
Lowest monthly mean	2 669	0 960	Aug 1976
Highest monthly mean	21 140	30 330	Oct 1967
Lowest daily mean	1 168	0 713	26 Aug 1976
Highest daily mean	122 400	168 200	23 Mar 1968
Peak	275 200	283 700	10 Dec 1980
10 %ile	28 510	23 420	122
50 %ile	5 027	5 126	98
95 %ile	1 595	1 368	117
Annual total (million cu m)	351.90	320.00	110
Annual runoff (mm)	1093	994	110
Annual rainfall (mm)	1475	1286	111
[1941-70 rainfall average (mm)]		1441]	

Factors affecting flow regime

● Natural to within 10% at 95 percentile flow

Station description

Compound Crump weir Two crests 15.2 m and 29.6 m broad

025001 **Tees at Broken Scar**

1981

Measuring authority NWA
First year 1956

Grid reference NZ 259137
Level stn. (m OD) 37 20

Catchment area (sq km) 818 4
Max alt. (m OD) 893

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	27 330	12 230	14 680	9 527	19 190	7 340	4 365	3 020	3 646	222 700	33 670	32 970
2	133 600	83 220	69 060	9 124	10 480	32 100	4 037	3 291	3 650	129 700	27 410	20 620
3	77 690	65 170	28 460	6 952	15 710	14 070	3 661	2 856	2 990	56 610	19 160	21 630
4	29 110	28 520	15 470	5 977	26 540	8 005	4 278	3 077	2 905	59 290	19 540	53 480
5	19 510	25 050	11 630	5 430	13 230	7 852	4 272	3 100	2 875	48 270	13 720	22 680
6	17 590	30 280	42 500	4 978	12 120	10 150	5 298	4 067	2 929	36 610	12 310	17 530
7	10 750	22 720	140 600	4 699	9 798	11 850	4 034	3 392	3 138	69 570	11 460	15 760
8	22 270	20 330	66 570	4 441	8 819	25 800	3 504	3 490	3 003	107 100	10 940	12 870
9	74 330	18 920	23 490	3 842	7 487	23 830	3 329	3 422	3 005	102 500	10 870	9 115
10	14 390	17 030	88 280	3 969	10 560	15 180	3 490	3 043	3 086	54 250	11 010	2 777
11	10 560	15 370	55 360	4 342	7 578	35 980	4 098	3 192	3 894	28 660	26 380	9 840
12	20 380	15 660	31 970	13 400	5 546	20 190	4 059	3 392	4 024	21 870	15 170	8 755
13	11 180	16 730	17 840	11 700	4 051	10 460	3 852	3 485	3 089	18 930	11 700	9 963
14	94 470	15 750	13 010	6 085	5 230	14 630	3 898	3 400	3 346	17 160	10 260	11 630
15	24 170	15 450	11 450	4 506	5 147	9 704	3 916	2 998	5 606	15 680	9 882	10 630
16	13 460	13 350	9 145	4 154	8 806	6 786	5 492	2 891	2 808	13 570	8 767	8 613
17	21 660	6 115	8 389	3 936	7 554	4 823	7 128	3 185	3 610	8 568	19 720	7 955
18	21 240	5 446	9 322	3 805	4 815	4 044	6 735	3 511	10 080	8 198	52 810	8 315
19	31 790	4 998	14 630	4 079	6 469	4 336	3 793	8 539	44 780	8 699	19 840	8 597
20	17 010	4 909	30 830	3 502	4 208	4 417	11 530	11 210	48 900	7 923	46 660	10 850
21	76 790	3 884	121 800	3 441	5 877	3 918	14 140	4 392	18 940	7 673	19 100	10 120
22	57 630	3 327	100 100	3 872	9 034	3 801	11 990	4 089	7 859	7 098	18 740	9 620
23	30 580	3 298	105 900	3 943	12 740	3 809	17 420	3 781	5 699	6 668	124 600	9 017
24	21 160	3 463	80 640	6 060	10 070	4 083	10 010	3 865	17 660	7 364	34 910	9 701
25	15 800	3 936	100 300	14 010	7 071	3 873	4 375	3 784	11 150	12 400	22 920	7 462
26	18 220	3 810	50 160	15 690	11 650	3 756	3 947	3 833	104 000	8 099	70 970	8 029
27	15 830	3 444	23 860	28 160	23 610	3 736	3 981	3 730	32 910	6 154	94 570	9 554
28	13 170	6 131	17 900	84 000	18 830	3 536	2 894	3 658	30 110	14 330	44 180	10 090
29	12 230		11 370	74 120	8 948	3 537	3 326	3 166	19 500	22 830	26 240	17 260
30	11 570		9 342	43 070	5 696	4 121	2 834	3 789	37 280	13 290	90 550	44 530
31	12 430		7 970		5 482		2 830	3 777		16 950		43 870
Average	29 930	16 730	42 970	13 150	10 080	10 320	5 565	3 885	14 880	37 380	31 270	15 600
Lowest	10 560	3 298	7 970	3 441	4 051	3 536	2 830	2 856	2 808	6 154	8 767	7 777
Highest	133 600	83 220	140 600	84 000	26 540	35 980	17 420	11 210	104 000	222 700	124 600	53 480
Peak flow	187 700	290 600	318 000	137 000	44 020	105 100	35 850	24 600	254 900	467 400	298 800	129 400
Day of peak	14	2	21	28	27	2	20	19	26	1	23	30
Monthly total (million cu m)	80 15	40 48	115 10	34 09	26 99	26 76	14 91	10 40	38 56	100 10	81 05	41 79
Runoff (mm)	98	49	141	42	33	33	18	13	47	122	99	51
Rainfall (mm)	86	66	172	80	94	64	53	45	187	176	135	87

Statistics of monthly data for previous record (Oct 1956 to Dec 1980)

Mean	Avg	27 410	23 810	22 700	18 640	10 080	5 901	6 328	9 906	11 040	17 020	21 710	27 450
Flows	Low	2 906	2 804	5 482	2 539	2 008	0 502	1 794	0 458	0 638	2 707	4 060	5 778
	(year)	1963	1963	1975	1957	1959	1957	1969	1959	1959	1969	1958	1971
	High	48 070	51 540	68 660	60 870	27 020	15 270	15 090	24 830	24 350	53 940	51 580	50 040
	(year)	1962	1966	1979	1977	1967	1972	1961	1957	1968	1967	1963	1979
Runoff	Avg	90	71	73	59	33	19	21	32	35	56	69	90
	Low	10	8	18	8	7	2	6	2	2	9	13	19
	High	157	152	225	193	88	48	49	81	77	177	163	164
Rainfall	Avg	117	90	92	76	80	74	87	102	96	100	110	122
	Low	51	23	29	10	18	22	32	23	19	27	25	43
	High	183	175	224	150	167	182	150	190	222	226	221	268

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	19 350	16 770	115
Lowest yearly mean		9 383	1973
Highest yearly mean		23 220	1979
Lowest monthly mean	3 885	0 458	Aug 1959
Highest monthly mean	42 970	68 660	Mar 1979
Lowest daily mean	2 777	0 023	16 Oct 1959
Highest daily mean	222 700	317 200	6 Mar 1963
Peak	467 400	679 300	23 Mar 1968
10 %ile	48 060	42 730	112
50 %ile	10 070	7 551	133
95 %ile	3 101	1 148	270
Annual total (million cu m)	610 20	529 30	115
Annual runoff (mm)	746	647	115
Annual rainfall (mm)	1245	1146	109
[1941-70 rainfall average (mm)]		1226]	

Factors affecting flow regime

- Reservoir(s) in catchment
- Abstraction for public water supplies
- Augmentation from surface water and/or groundwater

Station description

Compound Crump weir 64 m broad with two low sills each 4.6 m broad. Excess flows from Cocker Beck (R Skerne) diverted into catchment via Baydale Beck. See 025010 Mowden Bridge

027002 Wharfe at Flint Mill Weir**1981**Measuring authority: YWA
First year: 1937Grid reference: SE 422473
Level stn. (m OD) 13.67Catchment area (sq km): 758.9
Max alt. (m OD): 704

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	30 050	8 281	15 870	14 420	22 270	5 921	2 500	2 443	1 772	99 550	32 840	31 150
2	66 960	25 360	66 280	12 700	13 220	32 640	2 579	2 187	1 671	73 680	54 480	19 670
3	88 850	116 200	39 600	10 480	17 490	17 890	2 466	2 049	1 695	34 560	24 030	15 870
4	39 660	40 750	19 880	9 338	22 050	10 500	2 418	1 807	1 693	37 050	17 760	23 220
5	22 710	24 700	14 360	8 577	12 940	13 960	2 406	1 909	1 689	21 700	13 110	19 370
6	18 690	23 660	53 220	8 091	14 360	11 580	8 252	5 824	1 641	32 070	10 660	14 590
7	14 870	20 880	126 800	7 834	12 220	15 840	5 452	11 920	1 645	59 480	9 159	12 750
8	21 740	29 340	88 460	7 332	9 607	16 360	3 986	6 625	1 705	75 510	8 100	10 840
9	45 630	56 800	42 960	6 990	8 631	14 420	3 613	7 703	1 617	86 410	7 421	9 115
10	23 940	29 890	89 850	6 621	9 068	16 040	3 756	5 984	1 913	67 490	7 766	8 239
11	15 650	19 080	77 250	6 763	8 522	25 690	3 005	3 595	2 278	34 280	40 790	7 570
12	25 110	15 480	51 870	7 075	6 431	24 020	2 439	2 644	2 279	22 090	21 040	6 032
13	17 660	14 120	33 700	6 798	5 527	12 610	2 348	2 622	2 126	17 040	12 450	6 066
14	57 440	12 360	23 830	6 193	4 962	21 120	2 153	2 448	2 018	13 720	9 967	7 517
15	33 320	10 720	19 850	5 602	4 685	17 100	1 908	4 148	5 107	11 430	8 681	6 659
16	19 470	9 991	16 280	5 278	5 344	11 740	1 919	2 976	5 270	9 656	10 220	5 355
17	59 410	9 815	13 770	4 497	6 368	8 718	1 937	2 445	4 643	8 532	9 787	4 487
18	38 560	8 847	21 710	4 405	5 723	7 238	1 970	2 127	21 800	7 783	50 810	4 411
19	50 010	8 027	75 710	4 239	7 178	6 429	2 140	2 246	26 160	14 600	31 480	4 911
20	32 380	7 354	87 200	4 264	6 432	6 090	2 518	10 980	64 170	18 810	36 830	6 870
21	49 680	6 937	114 400	4 114	10 060	5 480	10 590	6 734	25 970	11 690	29 090	6 930
22	42 470	6 628	139 700	3 999	11 700	4 808	9 276	4 167	14 590	8 974	46 920	6 236
23	24 730	6 560	108 300	3 936	15 660	4 364	12 430	3 163	10 020	7 672	45 760	5 725
24	21 010	6 138	97 560	6 400	12 970	3 960	9 304	2 676	10 880	12 030	31 170	5 640
25	17 140	6 012	72 650	21 670	12 030	3 478	5 644	2 427	9 123	26 760	18 430	4 899
26	14 740	5 952	54 330	19 960	17 500	3 180	4 030	2 159	74 610	13 810	33 270	4 365
27	14 620	5 837	33 730	25 400	12 060	2 945	3 707	2 056	59 040	14 160	100 300	5 597
28	12 210	7 775	24 390	41 350	13 140	2 799	3 265	2 058	51 310	29 130	45 130	5 356
29	10 880	19 110	62 220	9 065	2 738	2 853	2 014	25 450	37 970	30 080	14 590	14 590
30	9 819	15 770	44 500	7 198	2 635	2 635	1 992	42 370	31 810	38 250	38 230	38 230
31	8 981		13 610		6 414		2 426	1 913		52 440		45 400
Average	30 590	19 390	53 940	12 700	10 670	11 080	4 063	3 743	15 870	32 000	27 860	11 860
Lowest	8 981	5 837	13 610	3 936	4 685	2 635	1 908	1 807	1 617	7 672	7 421	4 365
Highest	88 850	116 200	139 700	67 220	22 270	32 640	12 430	11 920	74 610	99 550	100 300	45 400
Peak flow	117 300	265 000	200 900	71 070	41 680	53 880	19 110	18 070	143 600	139 000	164 400	80 770
Day of peak	3	3	22	29	3	7	21	20	26	1	27	30
Monthly total (million cu m)	81 94	46 91	144 50	32 92	28 58	28 71	10 88	10 03	41 14	85 70	72 21	31 77
Runoff (mm)	108	62	190	43	38	38	14	13	54	113	95	42
Rainfall (mm)	100	88	222	77	88	75	58	64	170	178	122	73

Statistics of monthly data for previous record (Jan 1937 to Dec 1980—incomplete or missing months total 17.7 years)

Mean flows	Avg	26 530	24 460	20 150	15 750	11 300	7 262	8 303	12 070	13 610	17 430	22 760	27 110
	Low	4 471	2 974	6 741	4 497	2 312	1 546	1 675	0 992	1 470	3 026	5 027	10 230
	(year)	1963	1963	1961	1974	1980	1957	1976	1959	1937	1937	1963	
	High	39 260	54 590	53 890	35 240	26 750	18 570	16 440	41 340	33 520	54 000	51 090	62 090
	(year)	1961	1966	1979	1970	1967	1972	1963	1956	1968	1967	1963	1965
Runoff	Avg	94	79	71	54	40	25	29	43	46	62	78	96
	Low	16	9	24	15	8	5	6	4	5	11	17	36
	High	139	174	190	120	94	63	58	146	115	191	174	219
Rainfall	Avg	109	88	84	75	77	73	90	97	105	102	109	116
	Low	41	20	28	8	13	18	41	18	8	37	33	41
	High	165	194	170	147	181	177	185	183	241	225	211	224

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre 1981
Mean flow (m ³ s ⁻¹)	19 510	17 200	113
Lowest yearly mean		11 420	
Highest yearly mean		23 300	
Lowest monthly mean	3 743	0 992	1975
Highest monthly mean	53 940	62 090	1966
Lowest daily mean	1 617	0 425	1976
Highest daily mean	139 700	233 600	1965
Peak	265 000	325 600	1957
10 %ile	49 850	40 620	123
50 %ile	10 650	9 682	110
95 %ile	2 007	2 254	89
Annual total (million cu m)	615 30	542 80	113
Annual runoff (mm)	811	715	113
Annual rainfall (mm)	1315	1125	117
[1941-70 rainfall average (mm)]		1161]	

Factors affecting flow regime

- Reservoir(s) in catchment
- Abstraction for public water supplies
- Flow reduced by industrial and/or agricultural abstractions.
- Augmentation from surface water and/or groundwater.

Station description

Broad crested weir 47.3 m broad, rated by current meter gauging from a cableway 1.5 km upstream of the station. Pre-1/10/65 rating may be less reliable.

027025 Rother at Woodhouse Mill

1981

Measuring authority YWA
First year: 1961
Grid reference SK 432857
Level stn (m OD) 28.72
Catchment area (sq km) 352.2
Max alt (m OD) 367

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3 474	2 944	13 650	8 415	9 706	4 213	1 761	1 300	1 371	4 738	3 077	6 086
2	4 090	5 507	26 980	5 772	7 273	9 861	1 852	1 298	1 241	3 862	2 890	4 668
3	4 350	11 120	24 770	4 917	7 037	5 075	1 960	1 318	1 281	3 391	2 767	4 120
4	3 703	6 967	11 550	4 514	6 207	4 012	1 753	1 334	1 213	4 588	2 586	4 554
5	3 456	5 037	8 422	4 231	6 458	3 548	1 762	3 531	1 211	3 208	2 352	3 936
6	4 120	4 370	7 230	4 124	6 433	3 471	1 804	7 705	1 230	3 894	2 274	4 083
7	3 759	4 083	7 841	4 134	5 319	3 424	1 659	6 078	1 356	4 111	2 198	4 022
8	3 743	8 489	6 845	3 968	4 771	3 266	1 642	2 986	1 504	9 449	2 176	3 516
9	3 604	43 120	15 670	3 975	5 909	2 962	2 077	2 445	1 288	10 810	2 099	3 135
10	3 327	20 850	24 950	3 600	8 683	2 933	1 945	2 012	2 770	15 990	2 092	2 966
11	3 079	10 870	31 540	4 037	5 684	3 073	1 751	1 802	2 722	8 426	2 104	2 853
12	4 345	8 661	15 560	3 624	4 665	2 886	1 748	1 685	2 983	5 762	2 161	2 503
13	3 337	7 268	11 400	3 613	4 352	2 526	1 730	1 542	1 601	4 499	2 060	2 617
14	6 063	6 041	18 120	3 187	3 792	3 104	1 682	1 537	2 573	3 800	2 046	3 323
15	5 042	5 337	12 720	3 042	3 696	3 002	1 675	1 464	2 995	3 214	2 047	3 156
16	5 871	4 920	8 745	2 924	4 160	2 440	1 767	1 409	1 671	2 802	2 065	2 696
17	10 560	4 447	7 165	2 874	4 848	2 328	1 739	1 527	1 642	2 566	2 208	2 422
18	7 363	4 120	6 545	2 693	4 385	2 271	1 646	1 500	2 148	2 432	10 640	2 377
19	7 207	3 841	5 914	2 560	3 812	2 275	1 558	1 540	8 037	4 237	5 228	2 231
20	6 037	3 603	5 251	2 470	12 470	2 291	1 661	1 608	4 991	12 390	6 335	2 961
21	11 830	3 476	24 440	2 468	9 035	2 155	1 625	1 423	2 427	5 330	4 767	3 294
22	7 057	3 488	28 630	2 654	5 215	2 126	1 799	1 380	1 942	3 928	3 902	2 969
23	5 704	3 759	24 500	2 610	4 697	2 057	2 069	1 433	1 699	3 242	5 670	2 933
24	4 967	3 348	15 250	7 521	4 053	2 191	1 698	1 410	1 705	7 004	5 324	2 982
25	4 435	3 250	12 440	32 380	11 190	1 953	1 612	1 358	2 145	7 033	4 134	2 667
26	4 121	3 202	11 610	43 650	7 028	1 926	1 587	1 330	12 500	4 530	3 900	2 643
27	3 641	4 303	8 222	47 690	5 157	1 918	1 488	1 305	4 963	3 848	6 008	7 723
28	3 462	14 880	6 828	38 570	12 200	1 896	1 263	1 311	3 043	3 511	8 046	3 247
29	3 326		5 980	26 760	6 605	1 866	1 304	1 245	4 726	3 429	5 477	11 330
30	3 128		5 368	13 960	5 116	1 792	1 352	1 759	12 360	3 722	7 752	42 610
31	3 009		4 877		4 638		1 351	1 269		3 804		42 460
Average	4 878	7 546	13 500	9 896	6 277	2 961	1 688	1 947	3 111	5 275	3 878	6 067
Lowest	3 009	2 944	4 877	2 468	3 696	1 792	1 263	1 245	1 211	2 432	2 046	2 231
Highest	11 830	43 120	31 540	47 690	12 470	9 861	2 072	7 705	12 500	15 990	10 640	42 610
Peak flow	15 080	51 230	46 120	52 390	19 620	15 450	3 102	13 670	20 310	26 270	16 140	58 680
Day of peak	21	9	2	27	20	2	3	6	30	10	18	31
Monthly total (million cu m)	13 06	18 26	36 16	25 65	16 81	7 68	4 52	5 21	8 06	14 13	10 05	16 25
Runoff (mm)	37	52	103	73	48	22	13	15	23	40	29	46
Rainfall (mm)	55	85	132	109	86	38	27	59	124	91	59	79

Statistics of monthly data for previous record (Oct 1961 to Dec 1980—incomplete or missing months total 2.6 years)

Mean flows	Avg	6 200	7 233	6 354	4 762	3 637	2 350	1 972	2 012	2 195	2 650	4 623	6 123
	Low	1 287	1 424	1 830	1 400	1 569	1 166	0 934	0 760	0 712	0 693	1 023	2 393
	(year)	1963	1963	1976	1976	1976	1976	1976	1976	1976	1976	1964	1971
	High	12 020	22 440	14 330	13 160	10 110	3 556	4 907	3 323	7 786	6 596	8 200	18 140
	(year)	1977	1977	1979	1966	1967	1979	1968	1966	1965	1966	1969	1965
Runoff	Avg	47	50	48	35	28	17	15	15	16	20	34	47
	Low	10	10	14	10	12	9	7	6	5	5	8	18
	High	91	154	109	97	77	26	37	25	57	50	60	138
Rainfall	Avg	68	63	62	57	60	56	62	62	63	57	76	71
	Low	20	18	13	13	15	11	14	6	18	12	33	13
	High	107	180	116	122	157	126	170	101	171	140	150	194

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	5 576	4 161	134
Lowest yearly mean		2 540	
Highest yearly mean		6 364	1964
Lowest monthly mean	1 688	0 693	1966
Highest monthly mean	13 500	22 440	Oct 1972
Lowest daily mean	1 211	5 Sep	14 Jun 1973
Highest daily mean	47 690	27 Apr	29 Dec 1978
Peak	58 680	31 Dec	29 Dec 1978
10 %ile	11 190		9 191
50 %ile	3 586		2 499
95 %ile	1 340		0 874
Annual total (million cu m)	175 80		131 30
Annual runoff (mm)	499		373
Annual rainfall (mm)	944		757
(1941-70 rainfall average (mm))			764]

Factors affecting flow regime

- Reservoir(s) in catchment
- Flow influenced by groundwater abstraction and/or recharge
- Abstraction for public water supplies
- Flow reduced by industrial and/or agricultural abstractions
- Augmentation from effluent returns

Station description

Velocity-area station rated by current meter gauging from a cableway 35m downstream

027035 Aire at Kildwick Bridge

1981

Measuring authority: YWA
First year: 1970

Grid reference: SE 013457
Level stn. (m OD) 87.32

Catchment area (sq km) 282.3
Max alt. (m OD) 594

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	13 830	3 425	12 830	5 270	5 043	1 860	0 825	0 626	0 511	53 370	17 210	13 360
2	29 630	23 950	18 910	4 451	3 564	8 876	0 867	0 588	0 489	39 160	18 210	9 512
3	28 240	39 630	8 811	3 887	5 241	4 136	0 827	0 561	0 492	23 370	10 720	8 009
4	14 440	19 300	5 833	3 413	4 340	3 078	0 749	0 555	0 478	21 180	7 926	12 030
5	9 953	11 770	5 687	3 111	3 091	2 806	1 054	0 555	0 451	13 710	6 200	8 329
6	9 666	9 982	17 570	2 714	3 059	2 809	1 337	4 020	0 440	20 520	5 344	7 080
7	8 052	8 079	46 880	2 414	2 631	2 793	0 980	3 081	0 458	30 760	4 695	6 869
8	10 640	14 060	29 930	2 298	2 326	3 746	0 895	1 850	0 459	46 430	4 258	5 283
9	12 140	19 540	18 800	2 414	2 140	4 808	0 820	2 333	0 398	42 330	3 740	4 359
10	7 818	10 280	40 350	2 341	2 175	6 010	0 738	1 338	0 477	34 950	3 844	3 920
11	6 469	7 579	34 410	2 612	1 849	11 210	0 711	1 006	0 628	18 560	7 952	3 543
12	8 542	6 710	24 900	2 482	1 615	6 576	0 681	0 862	0 906	12 740	5 387	2 969
13	6 821	5 665	14 360	2 213	1 448	4 395	0 651	0 799	0 561	9 576	4 529	2 823
14	23 680	4 801	9 699	1 969	1 401	4 785	0 624	0 933	1 082	7 885	3 926	3 434
15	11 430	4 297	7 855	1 839	1 497	4 695	0 675	0 890	1 962	6 146	3 555	2 944
16	14 750	4 040	6 456	1 730	1 624	3 308	0 633	0 763	0 902	4 964	3 500	2 369
17	40 030	3 629	5 518	1 504	1 402	2 726	0 665	0 658	0 924	4 255	6 171	2 318
18	19 680	3 317	18 750	1 295	1 396	2 280	0 767	1 257	4 318	3 816	26 840	2 260
19	17 340	3 063	46 090	1 729	1 253	2 095	0 700	2 006	8 411	9 536	12 870	2 283
20	11 930	2 836	36 030	1 181	1 380	1 880	1 940	2 879	12 080	10 310	15 050	3 850
21	16 300	2 633	53 030	1 121	1 801	1 592	3 869	1 503	5 611	5 996	11 470	3 661
22	10 890	2 445	58 010	1 157	1 993	1 414	3 016	1 171	3 754	4 614	10 760	2 998
23	8 490	2 388	51 100	1 213	2 274	1 315	2 715	0 987	2 997	3 996	20 490	2 708
24	7 733	2 236	36 850	2 966	2 351	1 288	1 869	0 878	4 696	13 250	11 490	2 505
25	6 050	2 201	28 000	15 480	2 715	1 219	1 368	0 766	3 189	10 340	9 521	1 968
26	6 902	2 075	20 550	9 829	2 220	1 073	1 130	0 684	37 580	6 548	26 640	2 730
27	5 996	2 113	13 220	11 610	3 826	0 997	0 982	0 624	19 090	8 469	44 840	2 120
28	5 098	3 811	9 491	13 020	4 158	0 941	0 871	0 595	16 480	18 540	25 100	2 625
29	4 534	7 331	12 540	2 520	0 859	0 770	0 770	0 585	11 840	20 920	14 450	13 960
30	4 143	5 895	8 367	2 094	0 836	0 711	0 711	0 562	15 760	21 070	22 020	31 570
31	3 747	5 009	1 966	1 966	0 660	0 660	0 660	0 543	19 230	19 230	19 230	27 280
Average	12 400	8 066	22 520	4 254	2 448	3 214	1 131	1 176	5 081	17 570	12 290	6 328
Lowest	3 747	2 075	5 009	1 121	1 253	0 836	0 624	0 543	0 398	3 816	3 500	1 968
Highest	40 030	39 630	58 010	15 480	5 241	11 210	3 869	4 020	32 880	53 370	44 840	31 570
Peak flow	55 650	64 750	69 660	24 210	7 505	16 310	6 968	8 166	52 520	61 070	60 370	40 880
Day of peak	17	2	22	25	3	2	20	6	26	1	26	30
Monthly total (million cu m)	33 22	19 51	60 32	11 03	6 56	8 33	3 03	3 15	13 17	47 05	31 86	16 95
Runoff (mm)	118	69	214	39	23	30	11	11	47	167	113	60
Rainfall (mm)	107	88	233	64	72	67	49	57	167	187	133	68

Statistics of monthly data for previous record (Dec 1968 to Dec 1980—Incomplete or missing months total 0.3 years)

Mean	Avg	8 763	8 268	6 285	4 540	2 864	2 069	1 802	2 833	3 608	5 895	10 340	9 797
Flows	Low	4 463	4 758	2 652	0 927	0 611	0 605	0 564	0 289	1 147	0 788	3 583	3 175
	(year)	1973	1976	1975	1974	1974	1970	1976	1976	1971	1972	1975	1971
	High	13 280	12 830	16 100	9 586	6 022	6 133	5 927	7 020	10 370	17 320	15 580	20 820
	(year)	1975	1980	1979	1970	1979	1972	1973	1980	1974	1980	1970	1979
Runoff	Avg	83	72	60	42	27	19	17	27	33	56	95	93
	Low	42	41	25	8	6	6	5	3	11	7	33	30
	High	126	114	153	88	57	56	56	67	95	164	143	198
Rainfall	Avg	115	81	94	69	76	76	84	89	115	103	134	114
	Low	67	35	44	3	10	23	47	17	27	37	76	42
	High	169	139	165	135	142	155	151	151	250	213	187	238

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	8 060	5 574	145
Lowest yearly mean		3 652	1971
Highest yearly mean		7 993	1979
Lowest monthly mean	1 131	0 289	Aug 1976
Highest monthly mean	22 520	20 820	Dec 1979
Lowest daily mean	0 398	0 180	23 Aug 1976
Highest daily mean	58 010	79 900	27 Oct 1980
Peak	69 660	98 130	5 Dec 1972
10 %ile	20 630	13 270	155
50 %ile	3 796	2 851	133
95 %ile	0 605	0 545	111
Annual total (million cu m)	254 20	175 90	145
Annual runoff (mm)	900	623	145
Annual rainfall (mm)	1292	1150	112
(1941-70 rainfall average (mm))		1126]	

Factors affecting flow regime

● Reservoir(s) in catchment.

Comment

Flows below 1 m³ s⁻¹ are of limited precision
Low flow calibration under review.

Station description

Velocity-area station with bridge invert as control Current meter gauging from cableway downstream

027041 Derwent at Buttercrambe

1981

Measuring authority YWA Grid reference SE 731587 Catchment area (sq km) 1586 0
First year 1973 Level stn (m OD) 9 50 Max alt (m OD) 454

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	19 130	15 580	33 800	35 520	26 810	15 080	8 668	8 678	6 684	14 980	15 290	38 510
2	19 070	16 070	45 690	33 650	23 380	15 140	8 574	8 425	6 568	17 530	14 700	22 850
3	18 790	25 830	45 360	29 470	22 960	14 930	9 041	8 137	6 510	16 670	13 460	19 190
4	17 550	20 250	33 020	27 380	25 090	14 010	8 772	7 863	6 399	13 950	12 710	27 300
5	16 680	17 300	26 490	25 590	27 550	13 580	8 544	7 802	6 287	13 070	11 840	28 170
6	16 460	16 400	37 800	24 360	21 080	13 050	8 367	9 796	6 235	20 170	11 410	21 310
7	15 860	15 500	40 700	24 510	19 960	13 040	8 163	19 540	6 166	32 710	11 180	19 260
8	15 770	16 210	39 730	23 470	21 070	13 280	8 277	20 630	6 178	31 910	11 090	17 520
9	16 200	39 530	28 820	22 040	19 340	12 690	10 100	27 040	6 083	36 730	10 900	15 520
10	16 630	41 820	54 000	20 990	18 660	12 280	11 860	16 090	6 136	25 510	10 870	14 190
11	17 550	28 690	74 020	22 110	17 980	12 610	9 776	12 180	6 769	18 870	11 250	13 360
12	19 720	23 530	65 340	22 490	17 080	12 760	8 744	10 540	7 251	16 070	11 020	13 140
13	18 800	21 390	47 230	20 830	16 440	11 860	8 320	9 668	6 885	14 520	10 550	12 250
14	21 570	19 680	43 070	19 410	15 950	11 580	7 938	9 556	6 665	13 460	10 160	13 480
15	20 360	18 540	36 900	18 580	15 540	11 090	7 741	9 148	7 809	12 650	10 030	13 400
16	16 760	17 900	31 890	17 880	16 450	10 760	7 995	8 631	7 967	11 970	10 280	12 700
17	17 220	18 360	34 770	17 210	16 850	10 470	8 914	8 327	6 879	11 430	10 390	10 090
18	18 760	17 330	36 050	16 560	15 830	10 310	11 180	8 349	7 260	11 070	17 510	11 080
19	25 080	16 390	37 390	16 160	16 230	10 400	8 951	8 366	8 928	11 160	19 810	11 770
20	21 990	15 930	30 970	15 730	19 060	10 410	8 196	8 638	19 340	11 400	15 540	12 630
21	23 460	15 650	46 450	15 560	37 490	10 120	7 891	8 368	12 700	10 940	14 050	13 550
22	27 660	15 130	90 330	15 360	31 900	9 784	7 911	7 891	9 150	15 330	12 910	13 550
23	22 040	14 810	109 900	15 430	23 470	9 751	14 330	7 597	7 922	20 490	17 170	12 640
24	20 000	14 280	108 700	28 490	21 600	9 464	45 720	7 349	7 618	21 480	24 930	12 330
25	18 640	14 090	104 500	74 920	18 170	9 408	42 340	7 306	7 592	45 010	15 980	12 150
26	18 920	14 080	90 860	60 870	17 800	9 683	18 260	7 146	27 130	29 680	14 640	11 520
27	20 540	14 470	67 440	44 050	27 350	9 706	12 800	6 981	47 510	20 660	16 190	11 730
28	18 670	28 830	52 960	41 570	27 670	9 565	11 030	6 881	19 340	18 050	15 480	13 110
29	17 670	42 350	42 140	20 290	9 230	10 020	6 842	13 620	18 190	14 900	31 470	
30	16 850	35 670	35 950	17 730	8 949	9 322	6 805	15 430	16 590	32 880	64 160	
31	16 150	32 710		15 940		8 993	6 742		16 920		77 430	
Average	19 050	19 770	51 450	27 610	20 720	11 500	11 810	9 913	10 400	19 000	14 290	20 040
Lowest	15 770	14 080	26 490	15 360	15 540	8 949	7 741	6 742	6 083	10 940	10 030	10 090
Highest	27 660	41 820	109 900	74 920	37 490	15 140	45 720	27 040	42 510	45 010	32 880	77 430
Peak flow	30 540	48 480	114 700	78 040	37 700	15 570	53 760	31 660	50 800	49 340	49 670	78 980
Day of peak	22	9	23	25	22	1	24	9	27	25	30	31
Monthly total (million cu m)	51 02	47 83	137 80	71 56	55 48	29 81	31 64	26 55	26 96	50 90	37 03	53 68
Runoff (mm)	32	30	87	45	35	19	20	17	17	32	23	34
Rainfall (mm)	40	60	143	73	71	32	86	58	107	90	55	68

Statistics of monthly data for previous record (Oct 1973 to Dec 1980)

Mean flows	Avg	31 370	32 710	26 830	17 890	15 340	10 570	7 464	8 451	8 183	15 850	15 260	27 060
	Low	17 710	16 170	8 799	6 927	8 095	5 342	3 884	3 715	4 730	5 554	7 404	13 880
	(year)	1975	1976	1976	1974	1974	1974	1976	1976	1975	1975	1978	1973
	High	48 190	49 290	56 110	33 670	29 840	21 260	9 847	15 440	14 710	36 810	25 220	42 740
	(year)	1977	1978	1979	1979	1979	1979	1980	1980	1976	1976	1980	1978
Runoff	Avg	53	50	45	29	26	17	13	14	13	27	25	46
	Low	30	26	15	11	14	9	7	5	8	9	12	23
	High	81	75	95	55	50	35	17	26	24	62	41	72
Rainfall	Avg	87	55	62	43	64	57	66	65	73	83	61	90
	Low	34	21	6	16	22	11	18	10	21	21	28	46
	High	111	101	131	85	142	113	123	126	192	158	88	180

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	19 670	18 030	109
Lowest yearly mean		11 720	1975
Highest yearly mean		25 320	1979
Lowest monthly mean	9 913	3 215	Aug 1976
Highest monthly mean	51 450	56 110	Mar 1979
Lowest daily mean	6 083	2 697	23 Aug 1976
Highest daily mean	109 900	121 400	29 Dec 1978
Peak	114 700	123 700	29 Dec 1978
10 %ile	35 580	37 860	94
50 %ile	15 760	12 870	122
95 %ile	7 020	4 608	152
Annual total (million cu m)	620 30	569 00	109
Annual runoff (mm)	391	359	109
Annual rainfall (mm)	883	796	111
{1941-70 rainfall average (mm)		784}	

Factors affecting flow regime

- Abstraction for public water supplies

Station description

Crump weir 19 987 m broad Catchment area includes 33 2 sq km 027033 Sea Cut at Scarborough, but flow data do not include flood diversions

027053 Nidd at Birstwith**1981**Measuring authority: YWA
First year: 1975Grid reference: SE 230603
Level stn. (m OD) 67.40Catchment area (sq km): 217.6
Max alt. (m OD): 705**Daily mean gauged discharges (cubic metres per second)**

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	9 465	2 989	6 885	3 874	4 538	2 210	1 407	1 104	1 015	19 980	9 099	8 573
2	13 480	20 210	16 290	3 181	2 926	11 740	1 395	1 095	0 992	12 900	8 913	7 997
3	17 770	15 900	5 509	2 879	3 020	7 714	1 365	1 083	0 971	9 320	7 940	7 787
4	9 785	10 090	3 932	2 728	2 745	4 154	1 352	1 085	0 974	8 193	7 461	6 920
5	8 278	8 655	4 598	2 614	2 701	2 815	1 358	1 083	0 957	7 284	5 985	5 463
6	7 882	8 446	10 650	2 546	2 818	2 469	1 353	3 427	0 951	9 986	5 138	5 244
7	7 752	8 489	53 440	2 604	2 566	4 128	1 332	2 071	0 945	12 930	5 011	5 067
8	9 443	11 640	26 500	2 464	2 446	2 918	1 311	1 691	1 029	25 070	3 375	4 759
9	10 720	15 390	14 070	2 382	2 647	2 576	1 311	1 634	1 065	24 960	2 778	3 199
10	6 189	9 628	26 350	2 307	2 839	2 705	1 285	1 314	1 190	19 380	2 972	2 851
11	6 197	8 587	19 340	2 847	2 402	5 884	1 297	1 213	1 179	9 975	4 084	2 762
12	7 329	6 804	11 730	2 706	2 268	5 382	1 279	1 165	1 212	7 010	3 017	2 658
13	5 684	4 326	8 577	2 441	2 452	3 134	1 227	1 157	1 067	6 230	2 763	2 697
14	9 490	3 602	7 708	2 224	2 237	2 689	1 247	1 132	1 324	5 869	2 658	2 720
15	8 010	3 468	7 131	2 114	2 197	2 372	1 243	1 105	1 344	3 589	2 698	2 655
16	6 242	3 440	6 798	2 049	2 246	2 122	1 227	1 089	1 091	3 039	2 763	2 611
17	14 190	3 289	4 239	2 005	1 911	2 087	1 218	1 083	1 138	2 904	4 491	2 623
18	9 932	3 135	5 871	1 950	1 915	2 032	1 214	1 090	1 623	2 837	11 180	3 063
19	12 220	3 022	13 780	1 932	1 800	2 050	1 224	1 108	3 924	3 720	9 002	5 471
20	10 870	2 917	18 110	1 907	2 135	2 019	1 224	1 130	2 668	3 510	12 460	5 509
21	12 820	2 844	95 740	1 884	2 161	1 955	1 269	1 080	1 671	2 926	10 860	3 467
22	9 704	2 781	52 840	1 907	2 001	1 601	1 352	1 064	1 456	2 765	9 157	2 108
23	8 852	2 745	70 730	1 920	2 110	1 472	1 231	1 046	1 352	2 699	11 380	1 829
24	8 549	2 707	30 150	2 363	2 097	1 462	1 446	1 036	1 409	5 276	8 699	1 772
25	8 001	2 694	23 550	5 840	2 472	1 718	1 304	1 037	1 440	5 461	7 138	1 814
26	7 819	2 666	15 090	7 921	2 898	1 784	1 237	1 028	13 730	3 250	13 200	2 423
27	5 268	2 759	10 260	12 900	8 822	1 764	1 193	1 037	3 665	3 337	12 920	1 719
28	3 838	2 510	9 337	15 570	7 705	1 579	1 168	1 040	3 085	7 409	11 340	1 869
29	3 347	5 292	10 870	3 860	1 453	1 135	1 041	1 041	3 256	9 766	9 382	4 363
30	3 226	4 523	7 722	2 421	1 404	1 119	1 031	1 031	3 716	11 320	10 200	7 703
31	3 077	3 422		2 313		1 111		1 029		10 250		6 747
Average	8 540	6 276	19 100	3 948	2 893	2 980	1 301	1 236	2 048	8 489	7 267	4 079
Lowest	3 077	2 510	3 422	1 884	1 800	1 404	1 111	1 028	0 945	2 699	2 658	1 719
Highest	17 770	20 210	95 740	15 570	8 822	11 740	2 131	3 427	13 730	25 070	13 200	8 573
Peak flow	27 400	97 000	169 200	21 580	14 190	28 820	3 108	5 738	29 890	56 570	30 400	10 720
Day of peak	3	2	21	28	27	2	23	6	26	1	28	30
Monthly total (million cu m)	22 87	15 18	51 17	10 23	7 75	7 72	3 48	3 31	5 31	22 74	18 84	10 92
Runoff (mm)	105	70	235	47	36	35	16	15	24	104	87	50
Rainfall (mm)	115	110	243	71	90	75	57	64	170	184	127	80

Statistics of monthly data for previous record (Apr 1975 to Dec 1980—incomplete or missing months total 0.1 years)

Mean flows	Avg	8 366	8 995	8 794	3 546	3 076	1 617	1 200	1 828	2 342	5 550	6 862	11 320
	Low	6 927	3 866	2 497	1 890	1 135	1 015	0 912	0 886	1 263	1 508	1 893	3 612
	(year)	1980	1976	1976	1975	1980	1975	1976	1976	1977	1978	1975	1975
	High	10 230	14 520	21 140	7 247	5 083	2 397	1 451	2 493	3 920	15 120	10 590	20 280
	(year)	1978	1977	1979	1979	1977	1979	1980	1979	1976	1976	1977	1979
Runoff	Avg	103	101	108	42	38	19	15	20	28	68	82	139
	Low	85	45	31	23	14	12	11	11	15	19	23	44
	High	126	161	260	86	63	29	18	31	47	186	126	250
Rainfall	Avg	129	115	129	11	27	163	62	144	87	186	147	138
(1980 only)	Low	129	115	129	11	27	163	62	144	87	186	147	138
	High	129	115	129		27	163	62	144	87	186	147	138

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	5 693	5 266	108
Lowest yearly mean		4 915	1978
Highest yearly mean		7 148	1979
Lowest monthly mean	1 236	0 886	Aug 1976
Highest monthly mean	19 100	21 140	Mar 1979
Lowest daily mean	0 945	0 617	22 Jun 1975
Highest daily mean	95 740	109 400	28 Dec 1978
Peak	169 200	203 400	8 Mar 1979
10 %ile	11 710	13 450	
50 %ile	2 848	2 775	
95 %ile	1 065	1 102	
Annual total (million cu m)	179 50	166 20	108
Annual runoff (mm)	825	764	108
Annual rainfall (mm)	1 388	1 338	104
{1941-70 rainfall average (mm)}		860]	

Factors affecting flow regime

- Reservoir(s) in catchment.
- Abstraction for public water supplies.
- Augmentation from surface water and/or groundwater.

Station description

Velocity-area station with natural rock control

028009 Trent at Colwick

1981

Measuring authority: STWA
First year: 1958

Grid reference: SK 620399
Level: stn (m OD) 16 00

Catchment area (sq km): 7486 0
Max alt (m OD): 636

Daily mean gauged discharges (cubic metres per second)												
DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	83 230	72 270	209 000	126 800	196 300	83 720	40 290	31 070	27 870	158 700	97 630	185 700
2	99 630	71 560	222 700	133 600	148 200	129 900	38 960	30 400	28 270	106 200	83 340	135 300
3	166 500	138 700	230 200	110 300	123 900	172 500	40 150	29 110	28 630	88 690	76 560	106 800
4	134 000	141 100	176 900	95 480	139 100	104 600	43 220	29 030	27 450	83 660	71 250	103 000
5	102 000	118 700	136 300	87 560	125 200	80 190	39 880	30 580	27 840	77 480	65 410	103 200
6	103 000	104 800	145 100	84 330	141 200	70 750	38 760	80 270	28 730	72 690	83 040	94 990
7	143 900	95 100	153 600	90 890	121 500	68 690	38 510	136 500	26 920	88 220	60 890	96 750
8	123 600	93 600	151 600	86 820	106 000	66 460	36 760	110 400	27 630	99 890	57 200	100 300
9	105 500	224 500	165 100	86 160	92 680	61 890	53 120	68 940	29 600	127 700	56 650	87 010
10	103 100	309 900	325 600	82 180	96 240	59 280	67 720	52 960	30 390	153 100	54 780	77 440
11	89 250	229 300	477 400	77 480	98 000	62 210	48 240	44 190	42 010	143 800	54 990	74 320
12	89 170	156 400	553 700	72 740	84 340	63 240	40 920	38 430	57 090	123 400	54 690	63 990
13	96 970	126 000	451 900	72 040	77 290	58 490	38 680	35 870	46 260	105 600	52 210	59 100
14	127 100	108 500	332 600	67 000	71 950	54 780	36 060	35 660	37 590	91 330	50 510	66 540
15	238 900	95 930	265 200	64 310	69 090	56 710	36 100	33 460	52 860	78 450	49 220	97 960
16	199 500	87 740	204 900	62 350	90 290	54 610	36 280	31 830	45 580	68 260	51 650	90 060
17	278 500	85 200	163 600	60 370	91 010	52 540	37 050	31 220	39 010	61 530	49 420	73 790
18	272 100	81 820	141 300	58 220	90 270	53 240	38 150	31 430	49 510	58 340	83 850	62 550
19	226 900	77 490	152 200	57 800	90 190	51 310	35 190	31 490	69 040	62 250	151 600	56 580
20	179 400	73 660	134 900	55 420	93 790	51 570	34 110	34 010	134 800	159 000	120 300	61 460
21	175 500	71 040	163 100	53 680	152 500	49 470	35 130	37 840	89 890	194 200	122 000	80 000
22	200 500	70 450	294 800	54 860	117 000	47 490	41 410	34 530	56 700	125 700	95 990	77 630
23	156 500	74 730	309 300	55 460	99 270	46 160	60 420	34 730	45 320	92 170	86 660	68 370
24	130 100	77 450	316 600	80 440	91 820	46 130	54 070	32 850	53 860	84 040	102 000	60 170
25	113 300	72 350	251 100	150 000	107 400	45 450	44 260	31 450	62 330	141 900	87 280	54 750
26	103 100	70 320	228 400	253 400	120 200	44 730	38 470	31 450	149 400	119 600	82 570	50 150
27	95 370	71 220	197 800	324 500	94 580	43 920	39 120	30 030	227 800	95 650	106 600	51 430
28	87 440	152 300	154 400	391 300	107 900	41 750	35 910	29 610	140 500	84 380	130 000	56 030
29	82 850		128 400	384 700	102 500	41 060	34 970	30 690	92 770	81 300	121 400	147 500
30	79 110		114 000	255 900	85 480	40 880	32 460	30 050	184 400	89 160	124 600	308 600
31	75 150		104 200		80 360		31 870	29 110		117 900		500 700
Average	135 800	112 600	227 600	121 200	106 600	63 460	40 870	41 910	65 260	104 300	82 140	104 800
Lowest	75 150	70 320	104 200	53 680	69 090	40 880	31 670	29 030	26 730	58 340	49 220	50 150
Highest	277 100	309 900	553 700	391 300	196 300	172 500	67 720	136 500	227 800	194 200	151 600	500 700
Peak flow	277 300	318 900	571 200	418 600	210 800	201 000		142 700	239 000	215 600	172 300	603 000
Day of peak	18	10	12	29	1	2		7	27	21	19	31
Monthly total (million cu m)	363 80	272 30	609 60	314 20	285 60	164 50	109 50	112 30	169 20	279 40	212 90	280 80
Runoff (mm)	49	36	81	42	38	22	15	15	23	37	28	38
Rainfall (mm)	59	62	116	68	78	34	41	61	130	86	50	75

Statistics of monthly data for previous record (Oct 1958 to Dec 1980—incomplete or missing months total 0.2 years)

Mean flows	Avg	132 400	134 700	103 300	82 780	68 130	47 880	42 720	44 250	47 780	65 100	86 390	122 600
	Low	45 980	49 730	47 180	35 240	32 250	24 690	19 450	18 450	20 270	22 110	37 920	46 260
	(year)	1963	1963	1976	1976	1976	1976	1976	1976	1959	1959	1964	1975
	High	207 900	387 500	216 000	175 800	175 100	78 870	100 500	73 030	114 700	177 500	227 100	353 700
Runoff	(year)	1959	1977	1979	1966	1969	1979	1968	1966	1965	1960	1960	1965
	Avg	47	44	37	29	24	17	15	16	17	23	30	44
	Low	16	16	17	12	12	9	7	7	7	8	11	17
	High	74	125	77	61	63	27	36	26	40	63	79	127
Rainfall	Avg	72	57	56	57	60	58	60	71	65	64	74	78
	Low	23	8	13	11	18	14	18	22	3	12	38	15
	High	138	175	99	101	144	120	114	120	149	141	145	173

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	100 600	81 270	124
Lowest yearly mean		47 020	1976
Highest yearly mean		119 200	1966
Lowest monthly mean	40 870	Jul 18 450	Aug 1976
Highest monthly mean	227 600	Mar 387 500	Feb 1977
Lowest daily mean	76 730	6 Sep 14 700	23 Aug 1976
Highest daily mean	553 700	12 Mar 815 500	6 Dec 1960
Peak	603 000	31 Dec 1228 000	22 Dec 1976
10 %ile	185 200	168 100	110
50 %ile	82 490	54 560	151
95 %ile	30 810	26 070	118
Annual total (million cu m)	3173 00	2565 00	124
Annual runoff (mm)	424	343	124
Annual rainfall (mm)	860	777	111
[1941-70 rainfall average (mm)]		776]	

Station description
Velocity-area station

Factors affecting flow regime

- Reservoir(s) in catchment
- Flow influenced by groundwater abstraction and/or recharge
- Abstraction for public water supplies
- Flow reduced by industrial and/or agricultural abstractions
- Augmentation from surface water and/or groundwater
- Augmentation from effluent returns

028010 Derwent at Longbridge Weir**1981**Measuring authority: STWA
First year: 1935Grid reference: SK 356363
Level stn. (m OD) 44.40Catchment area (sq km): 1054.0
Max alt. (m OD): 636

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	23 190	15 830	27 310	32 000	57 220	18 050	8 844	7 327	5 541	17 160	19 170	45 570
2	55 430	18 370	43 980	26 090	40 410	27 660	8 686	7 407	5 576	15 180	18 770	36 070
3	83 380	47 920	58 790	22 930	36 990	20 100	9 009	7 314	5 392	13 620	18 040	32 000
4	48 450	37 480	36 530	21 320	37 360	18 070	8 616	7 020	5 545	16 270	16 750	33 370
5	33 950	29 610	29 340	19 840	31 600	16 600	8 658	5 977	5 441	13 650	16 400	28 720
6	32 310	28 850	30 990	19 560	36 250	16 860	8 685	7 405	5 569	14 980	18 450	28 200
7	27 290	25 680	40 470	19 190	30 460	16 660	8 362	11 670	5 809	15 410	17 800	31 460
8	25 970	32 630	34 930	18 160	27 210	15 970	8 521	9 329	5 746	32 280	17 230	30 140
9	24 510	84 680	43 920	17 840	24 560	14 990	13 500	7 816	5 713	34 150	16 740	25 810
10	23 440	50 350	81 370	16 510	28 120	14 600	10 120	6 958	7 569	64 090	16 330	24 560
11	20 910	37 680	108 800	15 970	24 420	14 670	8 747	6 383	7 176	45 330	16 160	21 520
12	23 030	31 870	80 710	15 670	20 900	14 560	8 343	6 163	7 329	35 530	15 750	15 770
13	20 310	28 090	58 510	15 110	18 450	13 440	8 393	5 948	5 955	30 320	15 000	15 810
14	64 950	24 310	54 150	14 080	16 850	13 460	8 260	5 793	7 352	26 510	14 610	17 050
15	56 690	21 730	45 680	13 700	16 760	14 540	8 294	5 733	8 837	22 800	14 370	16 650
16	42 750	20 410	36 750	12 740	17 620	12 940	8 528	5 587	6 373	19 270	14 790	15 030
17	72 310	19 470	32 590	12 670	17 080	12 720	8 502	5 740	6 054	17 380	11 550	13 870
18	59 700	18 380	30 310	12 450	16 890	11 800	8 274	5 678	6 809	16 300	41 280	13 150
19	52 650	17 260	60 870	12 380	15 930	11 290	8 140	5 866	14 080	19 620	31 010	12 600
20	40 110	16 400	39 330	12 050	23 510	10 860	8 195	6 694	16 070	39 500	35 300	13 790
21	43 630	15 530	84 920	11 950	19 190	10 800	8 878	6 313	8 490	24 690	31 640	13 580
22	37 430	15 460	100 600	11 790	17 510	10 350	9 447	5 899	7 228	20 750	27 850	12 770
23	30 830	15 050	92 190	11 840	18 280	10 080	10 180	5 905	6 480	18 230	29 370	12 490
24	27 940	14 090	81 930	16 980	17 160	10 020	9 076	6 031	6 706	26 370	28 660	12 010
25	25 810	13 610	67 880	45 080	26 910	9 753	8 562	5 703	6 990	76 070	26 810	11 750
26	23 910	13 410	65 020	59 990	21 120	9 675	8 426	5 520	40 040	21 250	27 800	11 570
27	21 380	13 480	47 890	62 710	21 200	9 419	11 030	5 246	22 040	19 940	44 950	11 610
28	18 560	27 810	40 070	70 350	29 180	9 288	8 096	5 449	14 250	18 720	45 560	12 680
29	17 680		34 480	101 900	22 810	9 037	7 765	5 476	19 710	19 390	37 380	26 350
30	16 710		30 060	77 820	20 370	8 796	7 752	5 557	37 570	21 680	48 080	102 300
31	16 350		27 100		19 430		7 455	5 661		22 400		81 810
Average	35 860	26 270	53 140	27 350	24 900	13 550	8 818	6 468	10 450	24 160	24 450	25 160
Lowest	16 350	13 410	27 100	11 790	15 930	8 796	7 455	5 246	5 392	13 620	11 550	11 570
Highest	83 380	84 680	108 800	101 900	57 220	27 660	13 500	11 670	40 040	64 090	48 080	102 300
Peak flow	113 600	100 000	122 800	107 600	70 140	32 490		13 920	72 070	83 340	63 480	145 400
Day of peak	14	9	21	28	1	2		7	30	10	18	30
Monthly total (million cu m)	96.04	63.54	142.30	70.89	66.68	35.12	23.62	17.32	27.08	64.70	63.38	67.40
Runoff (mm)	91	60	135	67	63	33	22	16	26	61	60	64
Rainfall (mm)	101	92	185	101	98	49	55	63	154	144	103	92

Statistics of monthly data for previous record (Jan 1938 to Dec 1980—incomplete or missing months total 5.1 years)

Mean	Avg	28 740	29 270	22 300	16 980	12 440	9 394	8 798	8 690	10 820	13 140	22 130	26 050
flows	Low	9 751	8 086	9 110	7 677	5 517	4 530	4 211	3 176	3 399	3 782	4 307	8 480
	(year)	1963	1963	1976	1976	1956	1957	1976	1952	1952	1947	1975	1975
	High	67 000	76 780	69 410	39 590	26 410	18 010	28 660	33 940	33 170	35 130	54 360	88 680
	(year)	1939	1977	1947	1966	1967	1969	1958	1956	1946	1960	1940	1965
Runoff	Avg	73	68	57	42	32	23	22	22	27	33	54	66
	Low	25	19	23	19	14	11	11	8	8	10	11	22
	High	170	176	176	97	67	44	73	86	87	89	134	225
Rainfall	Avg	102	81	71	64	69	68	81	84	80	86	106	99
	Low	33	8	16	8	15	15	25	10	3	17	16	70
	High	215	236	173	129	163	138	158	185	199	178	232	246

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	23 410	17 340	135
Lowest yearly mean		9 626	1976
Highest yearly mean		25 200	1966
Lowest monthly mean	6 468	3 176	Aug 1952
Highest monthly mean	53 140	88 680	Dec 1965
Lowest daily mean	5 246	1 317	30 Aug 1952
Highest daily mean	108 800	334 100	10 Dec 1965
Peak	145 400	30 Dec	
10 %ile	45 530	34 620	132
50 %ile	17 780	11 940	145
95 %ile	5 754	4 470	129
Annual total (million cu m)	738.30	547.20	135
Annual runoff (mm)	700	519	135
Annual rainfall (mm)	1237	991	125
[1941-70 rainfall average (mm)]		1020]	

Station description

Velocity-area station with broad crested horseshoe weir for control, long and insensitive

Factors affecting flow regime

- Reservoir(s) in catchment
- Flow influenced by groundwater abstraction and/or recharge
- Abstraction for public water supplies
- Flow reduced by industrial and/or agricultural abstractions
- Augmentation from surface water and/or groundwater
- Augmentation from effluent returns

030001 Witham at Claypole Mill**1981**Measuring authority AWA
First year 1959Grid reference SK 842480
Level stn (m OD) 16.90Catchment area (sq km) 297.9
Max alt (m OD) 158**Daily mean gauged discharges (cubic metres per second)**

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1.498	1.533	4.002	3.406	4.762	1.785	1.147	0.621	0.486	1.105	0.981	0.903
2	1.493	1.619	6.801	2.957	4.070	5.501	1.245	0.678	0.525	1.004	0.977	0.915
3	1.491	2.092	7.015	2.836	3.976	3.422	1.208	0.563	0.504	0.837	0.840	0.848
4	1.409	1.817	4.339	2.734	3.742	2.272	1.054	0.526	0.547	1.630	0.901	0.892
5	1.368	1.686	3.541	2.626	3.483	2.035	1.112	0.586	0.555	1.218	0.800	0.888
6	1.400	1.692	3.214	2.565	3.349	1.966	1.015	2.328	0.534	1.014	0.768	0.958
7	1.376	1.590	3.679	2.557	3.197	1.805	1.035	1.838	0.448	0.810	0.741	1.092
8	1.379	1.613	3.374	2.330	3.099	1.821	0.932	1.240	0.530	0.878	0.734	1.048
9	1.363	7.554	5.834	2.412	3.014	1.843	1.552	1.066	0.543	0.826	0.729	0.975
10	1.335	6.401	13.170	2.389	3.319	1.669	1.317	0.987	0.518	0.781	0.719	0.855
11	1.320	3.875	14.790	2.711	3.151	1.715	1.052	0.859	0.584	0.915	0.771	0.795
12	1.425	3.097	8.293	2.235	2.925	1.615	0.947	0.807	0.692	0.860	0.691	0.730
13	1.392	2.582	7.509	2.236	2.773	1.552	0.871	0.762	0.567	0.723	0.732	0.686
14	1.698	2.282	11.630	2.185	2.639	1.534	0.879	0.754	0.540	0.709	0.727	0.836
15	1.688	2.096	8.597	2.063	2.454	1.520	0.966	0.730	0.620	0.636	0.704	1.106
16	1.613	1.920	6.236	2.009	2.584	1.430	0.964	0.729	0.536	0.762	0.711	0.897
17	1.705	1.965	5.287	1.958	2.538	1.405	0.974	0.683	0.552	0.657	0.707	0.846
18	1.990	1.820	4.978	1.836	2.452	1.409	0.912	0.678	0.823	0.620	0.743	0.840
19	2.166	1.825	4.537	1.848	2.736	1.399	0.869	0.662	0.998	0.654	0.755	0.828
20	1.953	1.801	4.247	1.756	3.467	1.439	0.854	0.735	0.940	3.510	0.891	0.862
21	5.700	1.759	4.091	1.784	3.404	1.409	0.840	0.744	0.698	1.819	0.740	0.970
22	4.132	1.805	3.983	1.837	2.778	1.361	0.805	0.745	0.541	1.226	0.713	0.946
23	2.981	1.858	4.341	1.775	2.590	1.299	0.909	0.678	0.565	1.045	0.712	0.856
24	2.483	1.730	4.128	2.229	2.326	1.338	1.049	0.706	0.686	1.178	0.747	0.840
25	2.166	1.664	3.945	3.993	2.930	1.309	0.975	0.718	0.645	1.534	0.716	0.744
26	1.965	1.755	3.638	21.310	2.617	1.292	0.866	0.689	2.031	1.291	0.715	0.767
27	1.841	1.781	3.364	19.910	2.458	1.311	0.797	0.554	1.781	1.163	0.842	0.813
28	1.764	3.293	3.312	8.855	2.314	1.264	0.719	0.559	1.049	1.034	0.837	0.901
29	1.668		3.134	6.431	2.135	1.319	0.783	0.526	0.822	1.008	0.767	2.441
30	1.596		2.918	5.251	2.051	1.244	0.721	0.483	1.491	1.017	0.921	8.705
31	1.534		2.894		1.904		0.644	0.499		1.106		10.290
Average	1.900	2.375	5.510	4.034	2.933	1.743	0.968	0.796	0.745	1.083	0.778	1.486
Lowest	1.320	1.533	2.894	1.756	1.904	1.244	0.644	0.483	0.448	0.620	0.691	0.686
Highest	5.700	7.554	14.790	21.310	4.762	5.501	1.552	2.328	2.031	3.510	0.981	10.290
Peak flow	7.187	11.200	18.070	29.650	5.912	7.787	2.391	3.540	3.088	5.545	1.181	12.840
Day of peak	21	9	11	26	20	2	9	6	26	20	27	31
Monthly total (million cu m)	5.09	5.75	14.76	10.46	7.86	4.52	2.59	2.13	1.93	2.90	2.02	3.98
Runoff (mm)	17	19	50	35	26	15	9	7	6	10	7	13
Rainfall (mm)	31	43	92	80	62	34	45	50	92	62	24	45

Statistics of monthly data for previous record (May 1959 to Dec 1980)

Mean	Avg	2.770	3.349	2.837	2.161	1.593	0.889	0.730	0.746	0.714	0.926	1.442	2.224
flows	Low	0.673	0.491	0.453	0.364	0.311	0.184	0.062	0.136	0.232	0.218	0.278	0.311
	(year)	1965	1976	1976	1976	1976	1976	1976	1976	1959	1959	1959	1964
	High	5.527	10.690	6.995	5.748	4.332	2.089	2.119	2.376	2.886	3.906	6.526	7.679
	(year)	1961	1977	1979	1979	1969	1969	1968	1980	1968	1960	1960	1965
Runoff	Avg	25	27	26	19	14	8	7	7	6	8	13	20
	Low	6	4	4	3	3	2	1	1	2	2	2	3
	High	50	87	63	50	39	18	19	21	25	35	57	71
Rainfall	Avg	54	42	46	48	47	50	54	62	49	48	59	59
	Low	20	3	8	10	11	3	14	12	3	5	26	13
	High	117	140	89	81	130	102	132	127	127	137	115	142

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	2.029	1.690	120
Lowest yearly mean		0.594	1976
Highest yearly mean		2.807	1979
Lowest monthly mean	0.745	0.062	Jul 1976
Highest monthly mean	5.510	10.690	Feb 1977
Lowest daily mean	0.448	0.021	24 Jul 1976
Highest daily mean	21.310	31.600	11 Feb 1977
Peak	29.650	37.540	11 Feb 1977
10 %ile	3.933	3.827	
50 %ile	1.356	0.948	103
95 %ile	0.557	0.311	143
Annual total (million cu m)	63.99	53.34	179
Annual runoff (mm)	215	179	120
Annual rainfall (mm)	660	618	107
[1941-70 rainfall average (mm)]		622]	

Factors affecting flow regime

- Flow influenced by groundwater abstraction and/or recharge
- Abstraction for public water supplies
- Flow reduced by industrial and/or agricultural abstractions
- Augmentation from surface water and/or groundwater

Station description

Compound broad crested weir Range 0.03-42.9 cu m/s

032001 Nene at Orton**1981**Measuring authority: AWA
First year: 1939Grid reference: TL 166972
Level stn. (m OD) 3.35Catchment area (sq km): 1634.3
Max alt. (m OD): 224

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	9 277	9 949	28 030	11 920	57 940	11 570	5 716	3 671	3 224	8 204	7 386	7 742
2	8 754	8 065	36 970	18 100	31 310	41 100	5 426	3 764	3 250	10 600	7 203	8 130
3	8 004	8 986	44 810	16 840	25 000	42 700	5 104	3 563	3 319	8 880	6 509	6 746
4	8 106	12 130	37 830	12 820	24 850	47 970	5 103	3 655	3 127	5 416	6 168	6 233
5	7 824	11 140	29 790	12 560	15 490	26 720	5 045	3 654	3 136	8 051	5 600	4 850
6	6 675	7 988	25 250	11 380	24 500	16 730	5 018	6 035	3 148	7 626	4 818	5 367
7	7 497	7 727	31 230	10 000	23 490	17 130	4 281	29 380	3 186	7 329	4 358	6 043
8	7 792	7 207	31 470	9 789	15 760	13 930	4 632	28 360	3 200	6 495	4 362	6 364
9	7 278	8 148	35 500	9 400	15 140	9 277	5 146	16 730	3 113	5 760	4 221	7 458
10	6 946	9 600	52 700	6 272	15 540	9 895	5 297	4 938	3 014	2 959	4 381	5 752
11	7 345	16 370	56 060	8 434	24 220	9 884	5 902	7 318	2 933	3 564	4 344	5 476
12	6 993	8 184	59 400	9 000	15 430	9 673	5 446	5 387	3 179	5 132	4 307	3 776
13	7 598	8 182	65 050	7 277	12 160	8 096	4 975	5 570	3 322	5 140	4 273	3 831
14	8 077	7 900	70 080	6 651	11 040	6 406	4 461	4 828	3 301	4 733	4 157	5 283
15	25 680	7 936	63 810	5 650	9 075	7 845	4 227	4 308	3 448	4 264	4 403	25 210
16	24 840	9 028	44 270	5 777	10 440	8 933	4 458	4 115	4 634	4 196	4 297	28 170
17	28 960	5 928	36 510	5 183	11 880	5 468	4 416	4 056	4 559	3 346	4 494	12 020
18	29 930	5 162	28 430	4 871	11 090	6 488	4 604	3 881	3 885	3 395	4 939	9 090
19	26 630	5 478	19 000	4 765	9 919	6 739	4 475	3 939	4 450	3 879	5 074	6 519
20	24 590	8 098	18 400	4 950	10 560	5 739	4 267	3 863	9 437	6 264	7 249	6 345
21	73 170	5 306	23 980	4 094	27 300	6 038	4 219	3 910	11 030	16 930	15 070	6 345
22	39 290	4 853	24 050	5 424	26 180	6 376	4 321	3 871	3 364	10 150	5 582	6 358
23	30 330	3 700	24 450	6 469	19 190	5 648	4 665	3 800	3 670	4 889	7 803	6 372
24	24 210	4 130	24 840	6 289	27 530	6 005	5 416	3 765	3 942	6 258	7 096	6 385
25	17 980	10 930	23 430	6 971	31 430	6 130	5 257	3 684	4 261	6 172	7 043	6 385
26	8 682	3 337	15 070	56 590	32 020	5 397	4 653	3 572	6 823	5 919	6 113	6 372
27	23 070	6 718	12 520	97 170	24 630	5 488	4 141	3 564	18 070	6 823	6 412	6 358
28	11 700	4 392	9 773	107 600	14 340	5 483	4 207	3 488	15 070	6 199	5 908	6 331
29	10 910	13 370	97 870	17 250	5 135	4 120	3 512	3 936	5 446	6 012	28 430	
30	10 830	16 500	82 660	11 690	5 166	3 981	3 224	7 109	5 443	7 203	46 700	
31	10 520	10 710		10 640		3 886	3 079		6 125		52 240	
Average	15 470	7 662	32 690	21 760	19 900	12 070	4 738	6 148	5 071	6 309	5 893	11 250
Lowest	6 675	3 337	9 773	4 084	9 075	5 135	3 886	3 079	2 933	2 959	4 157	3 776
Highest	39 290	16 370	70 080	107 600	57 940	42 970	5 902	29 380	18 070	16 930	15 070	52 240
Peak flow	43 950	33 030	71 420	113 000	75 330	48 410	6 028	32 820	20 490	19 380	19 550	53 700
Day of peak	22	25	14	27	1	2	11	7	27	21	21	31
Monthly total (million cu m)	41 43	18 53	87 55	56 40	53 31	31 29	12 69	16 47	13 14	16 90	15 27	30 13
Runoff (mm)	25	11	54	35	33	19	8	10	8	10	9	18
Rainfall (mm)	37	28	91	72	73	38	26	56	95	53	33	53

Statistics of monthly data for previous record (Oct 1940 to Dec 1980)

Mean flows	Avg	17 080	19 150	16 440	10 050	6 880	4 580	3 720	3 650	3 210	4 380	9 420	12 870
	Low	2 831	2 207	1 642	1 843	1 444	0 538	0 849	0 481	0 736	1 015	1 144	1 641
	(year)	1954	1965	1944	1976	1944	1944	1944	1944	1943	1947	1947	1947
	High	48 180	46 750	78 640	33 050	26 100	13 010	20 060	20 470	20 090	22 120	40 560	42 550
	(year)	1959	1977	1947	1979	1967	1977	1968	1980	1968	1960	1960	1954
Runoff	Avg	28	28	27	16	11	7	6	6	5	7	15	21
	Low	5	3	3	3	2	1	1	1	1	2	2	3
	High	79	69	131	53	43	20	34	34	33	38	64	70
Rainfall	Avg	55	43	46	41	52	53	53	65	52	52	61	56
	Low	20	3	5	8	10	5	6	3	3	5	10	13
	High	109	111	132	86	117	156	123	110	127	130	155	124

Summary statistics

Factors affecting flow regime

	For 1981	For record preceding 1981	1981 As % of pre-1981	
Mean flow (m ³ s ⁻¹)	12 470	9 283	134	◆ Reservoir(s) in catchment
Lowest yearly mean				◆ Abstraction for public water supplies
Highest yearly mean				◆ Flow reduced by industrial and/or agricultural abstractions
Lowest monthly mean	4 738	0 481		◆ Augmentation from effluent returns
Highest monthly mean	32 690	79 641		
Lowest daily mean	2 933	0 058		
Highest daily mean	107 600	319 800		
Peak	113 000	27 Apr		
10 %ile	28 220			
50 %ile	6 656			
90 %ile	3 345			
Annual total (million cu m)	393 30	293 70	134	
Annual runoff (mm)	241	180	134	
Annual rainfall (mm)	655	629	104	
{1941-70 rainfall average (mm)}		624		

Station description

Group of weirs and sluices with regulated by-pass channels. High flows measured at alternative station Wansford 032010. Some river regulation by sluices. Harwell single path ultrasonic gauging station installed 1975

033002 Bedford Ouse at Bedford

1981

Measuring authority: AWA
First year: 1933
Grid reference: TL 055495
Level stn: (m OD) 24.75
Catchment area (sq km): 1460.0
Max alt: (m OD): 247

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	9 600	9 200	19 400	21 900	26 500	12 100	4 500	3 300	2 800	9 200	15 900	14 400
2	8 500	9 200	28 200	31 600	19 100	33 400	4 800	4 100	2 800	12 200	12 200	12 100
3	8 500	10 800	51 800	23 400	15 400	49 400	4 600	4 000	3 100	7 800	9 300	9 600
4	8 000	14 400	60 800	18 300	15 100	23 700	4 900	3 400	2 500	9 500	8 800	9 200
5	7 800	12 400	42 400	15 100	14 100	14 700	4 800	3 300	2 700	13 100	7 800	8 900
6	8 000	10 500	26 700	13 200	13 400	12 000	4 200	5 900	2 600	20 300	6 900	8 700
7	8 200	10 000	28 600	12 000	12 700	8 500	4 200	13 100	2 700	15 100	6 500	8 400
8	8 500	8 500	40 300	11 500	12 800	9 600	4 000	15 700	2 500	10 200	6 400	9 500
9	8 700	8 800	43 600	11 600	11 400	8 700	4 100	6 600	2 600	7 600	6 300	15 100
10	9 200	10 900	54 300	10 800	13 700	8 800	6 700	5 300	2 600	7 300	5 900	13 000
11	10 800	13 000	68 900	10 800	13 400	8 700	4 100	4 900	3 000	6 500	5 900	10 800
12	9 300	11 200	78 900	10 600	11 200	8 000	3 900	4 200	3 600	6 200	5 800	9 300
13	10 800	10 400	84 500	9 300	10 000	7 400	3 700	3 700	3 900	5 600	5 700	8 000
14	11 500	9 300	73 700	8 800	9 800	6 700	3 700	3 500	3 800	5 200	5 400	8 700
15	19 700	8 500	62 100	7 600	8 800	6 700	3 600	3 400	3 700	4 900	5 300	21 000
16	18 500	7 300	44 700	8 100	9 900	6 500	3 800	3 100	4 600	4 600	5 400	39 000
17	26 400	7 300	32 900	8 800	11 500	6 200	3 800	3 000	3 400	4 000	7 200	26 500
18	27 400	7 300	26 500	8 100	10 200	6 000	3 700	3 000	3 400	4 400	7 800	14 600
19	26 700	7 300	23 300	7 800	9 500	5 900	3 800	3 000	3 800	5 200	8 700	7 800
20	23 800	7 100	19 100	7 800	10 600	5 900	3 800	2 700	4 400	9 200	18 600	13 500
21	26 500	6 500	17 600	7 700	21 600	5 800	3 700	3 200	6 900	28 400	33 400	11 400
22	38 700	6 700	26 300	7 700	18 400	5 700	3 700	3 100	5 400	28 400	20 500	11 200
23	30 100	7 200	34 700	8 000	13 700	5 400	4 300	3 200	3 900	17 700	13 700	11 000
24	22 600	7 200	37 600	7 800	14 400	5 800	6 300	3 000	3 700	10 500	12 300	9 400
25	17 900	7 400	37 800	9 800	18 100	5 700	4 500	3 100	3 300	9 500	10 500	8 500
26	14 900	7 400	30 500	37 400	36 900	5 600	4 100	3 000	4 100	9 300	8 800	7 100
27	13 800	7 600	22 600	71 400	48 200	5 400	3 700	3 000	12 600	9 200	8 800	6 900
28	13 000	9 100	19 200	98 200	28 200	4 600	3 800	2 800	11 500	8 500	10 800	8 000
29	12 300	16 500	107 000	22 600	22 600	4 600	3 600	2 800	6 200	8 200	19 500	25 800
30	11 600	16 100	55 700	28 300	28 300	4 600	3 700	2 800	5 900	8 200	16 100	60 800
31	10 800	18 500	24 900	24 900	24 900	3 100	2 800	11 700	11 700	11 700	71 100	71 100
Average	15 550	9 018	38 310	22 260	17 210	10 100	4 168	4 258	4 267	10 250	10 540	16 110
Lowest	7 800	6 500	16 100	7 600	8 800	4 600	3 100	2 700	2 500	4 000	5 300	6 900
Highest	38 700	14 400	84 500	107 000	48 200	49 400	6 700	15 700	12 600	28 400	33 400	71 100
Peak flow	40 600	15 300	86 400	119 000	50 000	52 100	8 000	16 800	15 900	34 800	35 500	78 200
Day of peak	22	4	13	29	27	3	8	8	27	21	21	31
Monthly total (million cu m)	41.65	21.82	102.60	57.70	46.09	26.19	11.16	11.40	11.06	27.45	27.32	43.14
Runoff (mm)	29	15	70	40	32	18	8	8	8	19	19	30
Rainfall (mm)	38	26	105	67	78	37	39	54	101	70	37	57

Statistics of monthly data for previous record (Apr 1933 to Dec 1980)

Mean flows	Avg	19 350	20 700	16 580	10 510	6 627	4 046	3 110	2 738	2 742	5 044	11 020	15 090
	Low	2 606	2 239	2 409	1 994	1 412	0 484	0 098	0 038	0 270	0 452	1 149	1 684
	(year)	1934	1934	1944	1976	1934	1934	1934	1934	1934	1934	1934	1964
	High	55 190	53 300	62 010	31 460	24 060	11 950	18 870	14 400	17 790	26 390	44 440	40 170
	(year)	1939	1977	1947	1951	1937	1954	1968	1980	1968	1966	1960	1960
Runoff	Avg	36	35	30	19	12	7	6	5	5	9	20	28
	Low	5	4	4	4	3	1	0	0	0	1	2	3
	High	101	88	114	56	44	21	35	26	32	48	79	74
Rainfall	Avg	59	43	48	43	55	51	55	64	51	58	64	59
(1936	Low	15	3	5	3	10	8	5	3	3	4	10	13
1980)	High	124	111	140	84	109	119	120	138	105	137	178	128

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	13 560	9 744	139
Lowest yearly mean		2 401	1934
Highest yearly mean		18 890	1937
Lowest monthly mean	4 168	0 038	Aug 1934
Highest monthly mean	38 310	62 010	Mar 1947
Lowest daily mean	2 500	0 008	31 Aug 1934
Highest daily mean	107 000	278 100	15 Mar 1947
Peak	119 000	29 Apr	
10 %ile	28 430	25 960	110
50 %ile	8 833	4 301	205
95 %ile	3 011	0 876	344
Annual total (million cu m)	427.60	307.50	139
Annual runoff (mm)	293	211	139
Annual rainfall (mm)	709	650	109
[1941-70 rainfall average (mm)]		650]	

Factors affecting flow regime

- Reservoir(s) in catchment
- Flow influenced by groundwater abstraction and/or recharge
- Abstraction for public water supplies
- Flow reduced by industrial and/or agricultural abstractions
- Augmentation from effluent returns

Station description

Three broad crested weirs, supplemented by three vertically lifting sluice gates for high flows

034006 Waveney at Needham Mill

1981

Measuring authority: AWA Grid reference: TM 229811 Catchment area (sq km): 370.0
First year: 1963 Level sin. (m OD) 16.50 Max alt. (m OD): 65

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1 427	1 544	4 152	2 121	5 167	1 261	0 560	0 514	0 293	0 525	1 592	1 760
2	1 504	1 450	4 588	1 916	3 752	1 468	0 527	0 512	0 332	0 525	1 321	1 569
3	1 777	1 703	6 730	1 795	3 127	1 300	0 521	0 466	0 315	0 501	1 092	1 349
4	1 567	1 676	5 860	1 772	3 218	1 056	0 490	0 454	0 322	0 762	0 972	1 504
5	1 779	1 343	4 184	1 712	2 443	0 946	0 461	0 425	0 303	0 975	0 876	1 703
6	1 295	1 171	4 373	1 550	2 403	0 881	0 448	0 444	0 290	0 961	0 807	1 761
7	1 174	1 094	5 526	1 428	1 933	0 845	0 448	0 455	0 293	1 141	0 754	1 797
8	1 159	1 060	6 021	1 225	2 119	0 848	0 451	0 472	0 323	0 897	0 709	1 738
9	1 756	1 308	10 710	1 219	2 511	0 806	0 810	0 469	0 324	0 753	0 678	1 414
10	4 503	2 760	27 360	1 192	3 611	0 771	0 972	0 459	0 329	0 665	0 687	1 152
11	3 957	3 175	29 060	1 314	3 034	0 786	0 775	0 453	0 325	0 848	0 754	1 057
12	4 487	2 654	25 310	1 232	2 156	0 763	0 637	0 434	0 321	0 842	0 762	0 936
13	4 563	2 027	18 450	1 006	1 663	0 686	0 583	0 426	0 311	0 731	0 728	0 766
14	11 470	1 689	13 540	0 925	1 432	0 639	0 567	0 425	0 320	0 640	0 665	0 835
15	15 140	1 534	11 370	0 898	1 244	0 623	0 560	0 394	0 356	0 608	0 691	1 182
16	9 131	1 382	9 401	0 874	1 197	0 614	0 547	0 363	0 358	0 531	0 792	1 464
17	8 514	1 244	6 672	0 838	1 098	0 574	0 547	0 368	0 351	0 501	1 231	1 407
18	10 370	1 215	5 540	0 801	1 084	0 521	0 520	0 383	0 361	0 480	1 462	1 241
19	8 636	1 175	4 547	0 803	1 311	0 512	0 496	0 384	0 381	0 528	1 440	1 048
20	6 934	1 127	3 677	0 809	1 211	0 507	0 498	0 425	0 454	2 637	3 561	0 934
21	6 722	1 050	3 095	0 797	1 167	0 494	0 506	0 439	0 405	2 654	3 263	1 117
22	7 348	1 044	3 053	0 830	1 111	0 485	0 513	0 395	0 406	1 420	2 205	1 160
23	5 694	1 234	2 802	0 923	1 154	0 492	0 544	0 365	0 365	1 034	1 887	1 053
24	4 653	1 187	2 778	1 189	1 156	0 604	0 635	0 363	0 375	0 946	1 699	1 060
25	3 704	1 139	2 857	6 625	1 289	0 825	0 669	0 381	0 518	1 823	1 370	1 067
26	3 020	1 267	3 236	27 080	1 563	0 752	0 595	0 356	0 654	1 693	1 345	1 039
27	2 657	1 479	3 211	49 820	2 143	0 676	0 531	0 318	0 738	1 368	1 263	1 451
28	2 270	2 449	2 728	24 090	2 777	0 623	0 493	0 305	0 598	1 237	1 241	3 333
29	2 311	2 429	12 040	1 948	0 583	0 470	0 296	0 551	1 094	0 862	14 980	
30	2 082	2 312	6 625	1 569	0 569	0 443	0 284	0 527	1 237	1 178	29 630	
31	1 868	2 047		1 381		0 456	0 290		1 804		29 370	
Average	4 612	1 542	7 665	5 182	2 031	0 750	0 557	0 404	0 393	1 044	1 263	3 609
Lowest	1 159	1 044	2 047	0 797	1 084	0 485	0 443	0 284	0 290	0 480	0 665	0 766
Highest	15 140	3 175	29 060	49 820	5 167	1 468	0 972	0 514	0 738	2 654	3 561	29 630
Peak flow	16 180	3 973	30 300	61 000	5 712	1 556	1 071	0 545	0 782	3 802	6 438	34 400
Day of peak	15	28	10	27	1	2	10	1	26	20	2	30
Monthly total (million cu m)	12 35	3 73	20 53	13 43	5 44	1 94	1 49	1 08	1 02	2 80	3 27	9 67
Runoff (mm)	33	10	55	36	15	5	4	3	3	8	9	26
Rainfall (mm)	57	28	96	81	62	36	59	10	61	86	37	61

Statistics of monthly data for previous record (Dec 1963 to Dec 1980)

Mean	Avg	3 574	3 806	2 449	1 644	1 031	0 583	0 497	0 509	1 010	0 826	1 905	2 888
flows	Low	0 609	0 722	0 591	0 487	0 369	0 286	0 285	0 282	0 261	0 352	0 397	0 492
	(year)	1973	1965	1973	1974	1974	1974	1973	1964	1964	1964	1964	1964
	High	7 132	10 670	5 283	3 851	3 255	1 019	0 880	1 250	9 754	2 912	8 852	8 380
	(year)	1969	1979	1979	1975	1969	1971	1969	1968	1968	1974	1974	1965
Runoff	Avg	26	25	18	12	7	4	4	4	7	6	13	21
	Low	4	5	4	3	3	2	2	2	2	3	3	4
	High	52	70	38	27	24	7	6	9	68	21	62	61
Rainfall	Avg	50	41	41	42	42	47	86	53	54	46	68	55
	Low	16	17	10	14	10	10	11	21	2	4	25	18
	High	78	72	72	73	97	104	364	101	161	110	150	100

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	2 434	1 716	142
Lowest yearly mean		0 537	
Highest yearly mean		2 730	
Lowest monthly mean	0 393	0 261	1973
Highest monthly mean	7 665	10 670	1969
Lowest daily mean	0 284	0 189	1964
Highest daily mean	49 820	89 760	1979
Peak	61 000	113 300	23 Aug 1973
10 %ile	4 584	4 133	16 Sep 1968
50 %ile	1 110	0 723	
95 %ile	0 338	0 319	
Annual total (million cu m)	76 76	54 16	
Annual runoff (mm)	207	146	
Annual rainfall (mm)	674	605	
[1941-70 rainfall average (mm)]		603]	

Factors affecting flow regime

- Flow reduced by industrial and/or agricultural abstractions
- Augmentation from surface water and/or groundwater

Station description

Compound Crump weir in main channel plus single crested Crump in mill bypass

036006 Stour at Langham

1981

Measuring authority: AWA
First year: 1962

Grid reference: TM 020344
Level stn. (m OD) 6.40

Catchment area (sq km): 578.0
Max alt. (m OD): 128

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2 045	2 265	2 387	4 438	4 173	2 261	1 447	1 359	1 004	2 122	2 574	8 085
2	2 239	2 473	4 674	3 989	3 553	4 045	1 450	1 481	0 996	2 497	1 440	3 877
3	2 434	2 121	8 484	2 879	3 081	2 961	1 480	1 245	0 821	1 802	1 681	2 698
4	2 753	2 538	6 024	3 169	3 831	2 150	1 552	1 219	1 012	1 720	1 622	2 854
5	2 331	2 225	3 972	3 070	3 094	1 836	1 475	1 345	0 860	2 203	1 329	2 613
6	2 056	2 052	5 071	2 458	2 990	1 790	1 414	2 030	0 891	4 008	1 381	2 433
7	1 927	2 012	6 557	2 743	2 604	1 830	1 259	2 657	0 903	5 483	1 310	4 160
8	1 933	2 243	6 759	2 628	2 710	1 707	1 367	0 984	0 868	3 395	1 537	4 174
9	1 998	1 870	11 870	2 612	3 011	1 655	1 812	1 066	1 095	1 517	1 310	3 541
10	3 139	2 300	22 350	3 035	11 470	1 378	2 792	1 156	1 118	1 840	1 287	2 693
11	3 861	2 444	35 400	2 988	7 576	1 574	1 588	1 183	1 052	1 694	1 333	2 394
12	3 509	2 370	33 480	3 703	3 431	1 585	1 253	1 111	1 179	1 645	1 416	2 017
13	5 325	2 387	27 040	2 882	2 650	1 430	1 261	1 227	1 590	1 455	1 432	1 758
14	5 855	2 159	18 490	2 455	2 667	1 333	1 260	1 273	1 191	1 335	1 405	3 391
15	7 592	2 014	13 800	2 537	2 440	1 296	1 223	1 172	1 534	1 275	1 483	3 745
16	5 138	2 145	11 940	2 380	2 465	1 276	1 249	1 223	1 602	1 171	1 561	8 101
17	5 790	1 838	10 380	2 113	2 254	1 239	1 223	1 303	1 313	1 169	1 890	3 887
18	7 737	1 818	8 432	2 099	2 346	1 241	1 210	1 278	1 164	1 120	2 346	2 787
19	7 494	1 771	7 029	2 029	2 489	1 345	1 170	1 734	1 202	1 113	2 345	2 350
20	6 070	1 697	5 487	2 104	2 259	1 472	1 149	0 937	1 702	5 419	7 298	2 265
21	4 197	1 624	4 545	2 024	3 862	1 444	1 150	1 304	1 799	10 830	6 290	2 545
22	8 510	1 671	4 104	2 041	9 208	1 359	1 325	1 204	1 335	4 015	3 489	2 419
23	6 309	1 850	4 249	2 104	4 218	1 360	1 391	1 210	1 156	2 550	2 967	2 055
24	5 247	1 899	4 196	2 214	3 248	1 568	1 460	1 385	1 323	2 270	2 740	1 881
25	4 148	1 830	6 417	3 088	3 222	1 731	1 462	1 168	1 454	2 773	1 747	1 888
26	3 298	1 795	7 633	9 681	4 896	1 671	1 342	1 048	2 272	2 113	1 720	1 743
27	2 113	1 627	7 548	17 370	4 838	1 733	1 259	0 803	3 466	1 383	1 841	1 787
28	2 832	3 765	5 080	19 230	4 946	1 585	1 232	0 928	2 484	2 464	1 905	2 535
29	2 575		4 055	9 193	2 883	1 429	1 213	1 030	1 812	1 826	1 808	13 800
30	2 447		3 875	5 793	2 415	1 436	1 157	1 007	1 162	0 913	1 799	26 800
31	2 412		3 998		2 180		1 279	1 014		1 571		42 940
Average	4 042	2 100	9 775	4 293	3 767	1 691	1 384	1 261	1 382	2 473	2 146	5 362
Lowest	1 927	1 624	2 367	2 024	2 180	1 239	1 149	0 803	0 860	0 913	1 287	1 743
Highest	8 510	3 765	35 400	19 230	11 470	4 045	2 792	2 657	3 466	10 830	7 298	42 940
Peak flow	9 894	4 396	36 250	22 870	14 650	5 161	3 498	3 693	3 931	14 860	11 410	43 850
Day of peak	22	28	11	28	10	2	10	7	27	20	20	31
Monthly total (million cu m)	10 83	5 08	26 18	11 13	10 09	4 38	3 71	3 38	3 58	6 62	5 58	14 38
Runoff (mm)	19	9	45	19	17	8	6	6	6	11	10	25
Rainfall (mm)	38	20	93	57	79	35	48	27	87	67	38	60

Statistics of monthly data for previous record (Oct 1962 to Dec 1980)

Mean flows	Avg	4 996	5 254	4 752	3 307	2 251	1 219	0 872	0 863	1 030	1 320	2 563	3 848
	Low	1 398	0 884	1 597	1 218	0 758	0 453	0 180	0 209	0 385	0 509	0 578	0 693
	(year)	1965	1965	1976	1974	1974	1965	1976	1976	1964	1970	1964	1964
	High	9 053	12 980	8 923	7 508	5 527	2 457	1 655	2 080	4 955	5 078	11 340	10 550
	(year)	1971	1979	1969	1975	1978	1971	1980	1968	1968	1974	1974	1965
Runoff	Avg	23	22	22	15	10	5	4	4	5	6	11	18
	Low	6	4	7	5	4	2	1	1	2	2	3	3
	High	42	54	41	34	28	11	8	10	22	24	51	49
Rainfall	Avg	47	37	44	44	43	47	45	52	51	44	62	52
	Low	15	16	12	12	12	10	8	11	1	3	20	13
	High	70	83	82	71	74	91	87	105	118	98	155	107

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	3 326	2 678	124
Lowest yearly mean		1 428	1973
Highest yearly mean		4 077	1979
Lowest monthly mean	1 261	0 190	Jul 1976
Highest monthly mean	9 775	12 980	Feb 1979
Lowest daily mean	0 803	0 094	9 Jul 1976
Highest daily mean	42 940	40 020	3 Feb 1979
Peak	43 850	40 960	3 Feb 1979
10 %ile	6 122	6 033	101
50 %ile	2 101	1 448	145
95 %ile	1 067	0 475	224
Annual total (million cu m)	104 90	84 51	124
Annual runoff (mm)	181	146	124
Annual rainfall (mm)	647	588	114
[1941-70 rainfall average (mm)]		601]	

Factors affecting flow regime

- Flow reduced by industrial and/or agricultural abstractions
- Augmentation from surface water and/or groundwater
- Augmentation from effluent returns

Station description

Twin-throated trapezoidal critical depth flume. Flow augmented as part of Ely-Ouse transfer scheme.

038003 Mimram at Panshanger Park**1981**Measuring authority: TWA
First year: 1952Grid reference: TL 282133
Level stn. (m OD) 47.10Catchment area (sq km): 133.9
Max alt. (m OD): 193**Daily mean gauged discharges (cubic metres per second)**

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.405	0.446	0.502	0.704	0.590	0.783	0.540	0.591	0.411	0.465	0.428	0.452
2	0.411	0.468	0.698	0.645	0.580	0.902	0.543	0.515	0.389	0.434	0.428	0.449
3	0.405	0.466	0.560	0.625	0.726	0.662	0.571	0.490	0.391	0.459	0.425	0.446
4	0.405	0.452	0.491	0.623	0.619	0.638	0.541	0.467	0.401	0.477	0.421	0.459
5	0.410	0.454	0.495	0.625	0.586	0.633	0.542	0.458	0.395	0.464	0.470	0.451
6	0.436	0.453	0.518	0.625	0.562	0.646	0.536	1.034	0.398	0.610	0.415	0.452
7	0.425	0.450	0.548	0.626	0.570	0.632	0.502	0.572	0.406	0.462	0.413	0.541
8	0.425	0.448	0.511	0.625	0.561	0.630	0.487	0.518	0.405	0.446	0.417	0.532
9	0.543	0.486	0.793	0.632	0.642	0.584	0.573	0.504	0.397	0.447	0.413	0.478
10	0.468	0.457	0.767	0.585	0.667	0.631	0.533	0.491	0.428	0.456	0.414	0.468
11	0.443	0.455	0.694	0.623	0.583	0.623	0.504	0.480	0.552	0.444	0.413	0.498
12	0.474	0.456	0.604	0.577	0.569	0.582	0.505	0.475	0.493	0.436	0.415	0.458
13	0.455	0.450	0.680	0.555	0.564	0.578	0.496	0.464	0.432	0.470	0.410	0.481
14	0.476	0.440	0.624	0.546	0.561	0.563	0.493	0.455	0.529	0.417	0.414	0.632
15	0.454	0.446	0.597	0.537	0.671	0.559	0.497	0.447	0.487	0.423	0.412	0.584
16	0.513	0.450	0.596	0.525	0.650	0.554	0.501	0.444	0.432	0.410	0.482	0.536
17	0.465	0.453	0.596	0.523	0.718	0.553	0.503	0.440	0.433	0.448	0.484	0.512
18	0.475	0.448	0.594	0.521	0.626	0.555	0.491	0.436	0.502	0.435	0.474	0.496
19	0.460	0.446	0.580	0.522	0.572	0.558	0.501	0.466	0.855	0.483	0.597	0.490
20	0.460	0.448	0.579	0.536	0.556	0.557	0.497	0.458	0.563	0.785	0.567	0.512
21	0.596	0.445	0.606	0.535	0.619	0.561	0.497	0.438	0.477	0.489	0.468	0.518
22	0.466	0.456	0.674	0.555	0.566	0.552	0.705	0.455	0.461	0.458	0.465	0.490
23	0.450	0.463	0.625	0.543	0.601	0.547	0.641	0.444	0.459	0.448	0.483	0.491
24	0.447	0.450	0.624	0.566	0.577	0.552	0.556	0.440	0.520	0.444	0.445	0.486
25	0.443	0.446	0.628	0.774	0.883	0.546	0.511	0.438	0.581	0.453	0.445	0.479
26	0.438	0.445	0.656	0.790	0.785	0.545	0.500	0.434	0.698	0.438	0.462	0.481
27	0.439	0.465	0.606	0.686	0.670	0.539	0.492	0.426	0.517	0.433	0.471	0.499
28	0.447	0.503	0.618	0.610	0.634	0.545	0.482	0.426	0.488	0.421	0.534	0.546
29	0.442		0.619	0.597	0.621	0.537	0.476	0.427	0.438	0.438	0.485	0.712
30	0.445		0.691	0.597	0.622	0.538	0.473	0.421	0.601	0.485	0.475	0.662
31	0.444		0.660		0.610		0.718	0.413		0.438		0.598
Average	0.454	0.455	0.614	0.601	0.624	0.596	0.529	0.483	0.485	0.463	0.453	0.513
Lowest	0.405	0.440	0.491	0.521	0.556	0.537	0.473	0.413	0.389	0.410	0.410	0.446
Highest	0.596	0.503	0.793	0.790	0.883	0.902	0.718	1.034	0.855	0.785	0.597	0.712
Peak flow	0.726	0.619	1.168	1.257	1.551	1.948	1.383	1.971	1.689	1.392	1.206	0.843
Day of peak	21	28	22	27	15	1	31	6	19	20	19	29
Monthly total (million cu m)	1.22	1.10	1.64	1.56	1.67	1.55	1.42	1.29	1.26	1.24	1.17	1.37
Runoff (mm)	9	8	12	12	12	12	11	10	9	9	9	10
Rainfall (mm)	38	15	101	58	78	31	67	40	87	63	39	53

Statistics of monthly data for previous record (Dec 1962 to Dec 1980)

Mean	Avg	0.577	0.648	0.674	0.660	0.612	0.550	0.483	0.449	0.419	0.407	0.444	0.498
Flows	Low	0.245	0.289	0.258	0.260	0.216	0.186	0.163	0.145	0.195	0.175	0.176	0.189
	(year)	1974	1973	1973	1973	1976	1976	1976	1976	1973	1973	1973	1973
	High	1.102	1.167	1.119	1.050	1.084	0.971	0.803	0.764	0.617	0.638	0.739	1.005
	(year)	1961	1961	1961	1979	1979	1979	1979	1979	1968	1968	1960	1960
Runoff	Avg	12	12	13	13	12	11	10	9	8	8	9	10
	Low	5	5	5	5	4	4	3	3	4	4	3	4
	High	22	21	22	20	22	19	16	15	12	13	14	20
Rainfall	Avg	55	45	47	45	47	58	55	60	55	57	62	64
	Low	17	3	3	5	15	5	5	7	5	5	20	13
	High	102	96	116	82	109	122	123	127	121	142	151	119

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre 1981
Mean flow (m ³ s ⁻¹)	0.523	0.535	98
Lowest yearly mean		0.231	1973
Highest yearly mean		0.767	1961
Lowest monthly mean	0.453	0.145	Aug 1976
Highest monthly mean	0.624	1.167	Feb 1961
Lowest daily mean	0.389	0.135	21 Aug 1978
Highest daily mean	1.034	1.795	30 May 1979
Peak	1.971	3.541	30 May 1979
10 %ile	0.639	0.800	80
50 %ile	0.496	0.507	98
95 %ile	0.412	0.225	183
Annual total (million cu m)	16.49	16.87	98
Annual runoff (mm)	123	126	98
Annual rainfall (mm)	670	650	103
[1941-70 rainfall average (mm)]		645]	

Factors affecting flow regime

- Flow influenced by groundwater abstraction and/or recharge
- Flow reduced by industrial and/or agricultural abstractions

Station description

Trapezoidal critical depth flume measures up to 11.3 cu m/s

038007 Canons Brook at Elizabeth Way**1981**Measuring authority TWA
First year 1950Grid reference TL 431104
Level stn (m OD) 37.54Catchment area (sq km) 21.4
Max alt (m OD) 110**Daily mean gauged discharges (cubic metres per second)**

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.066	0.063	0.275	0.570	0.144	0.156	0.059	0.208	0.066	0.196	0.104	0.118
2	0.069	0.119	1.008	0.274	0.131	0.122	0.072	0.080	0.064	0.109	0.088	0.102
3	0.066	0.111	0.394	0.191	0.430	0.089	0.070	0.068	0.063	0.142	0.084	0.097
4	0.063	0.080	0.199	0.154	0.246	0.088	0.068	0.064	0.064	0.190	0.084	0.118
5	0.063	0.069	0.192	0.141	0.270	0.086	0.068	0.066	0.064	0.112	0.081	0.106
6	0.080	0.067	0.193	0.132	0.141	0.181	0.068	0.525	0.070	0.506	0.079	0.107
7	0.052	0.066	0.225	0.127	0.153	0.104	0.068	0.120	0.067	0.165	0.081	0.349
8	0.052	0.068	0.184	0.112	0.100	0.088	0.070	0.089	0.048	0.130	0.081	0.377
9	0.225	0.109	1.008	0.112	0.405	0.083	0.254	0.074	0.050	0.124	0.080	0.222
10	0.079	0.069	1.108	0.277	0.410	0.234	0.068	0.066	0.214	0.156	0.080	0.162
11	0.065	0.066	0.774	0.397	0.174	0.152	0.060	0.062	0.362	0.101	0.081	0.190
12	0.152	0.068	0.326	0.150	0.122	0.077	0.060	0.062	0.101	0.091	0.080	0.183
13	0.128	0.064	0.369	0.131	0.102	0.068	0.058	0.063	0.073	0.069	0.078	0.318
14	0.156	0.062	0.329	0.117	0.088	0.069	0.057	0.064	0.314	0.073	0.078	1.498
15	0.102	0.063	0.253	0.110	0.399	0.069	0.057	0.065	0.119	0.076	0.078	0.871
16	0.302	0.064	0.228	0.111	0.176	0.068	0.057	0.068	0.064	0.068	0.342	0.317
17	0.176	0.063	0.215	0.111	0.222	0.066	0.094	0.069	0.061	0.131	0.182	0.200
18	0.207	0.063	0.165	0.108	0.128	0.067	0.064	0.071	0.378	0.087	0.299	0.148
19	0.155	0.061	0.141	0.110	0.131	0.068	0.060	0.188	0.992	0.460	0.512	0.121
20	0.152	0.060	0.134	0.108	0.133	0.068	0.062	0.089	0.179	0.865	0.447	0.158
21	0.380	0.060	0.146	0.110	0.347	0.065	0.068	0.063	0.080	0.197	0.201	0.208
22	0.190	0.110	0.162	0.165	0.239	0.071	0.218	0.109	0.067	0.123	0.144	0.148
23	0.144	0.086	0.213	0.115	0.292	0.079	0.459	0.063	0.061	0.098	0.201	0.120
24	0.118	0.065	0.319	0.202	0.273	0.080	0.117	0.063	0.776	0.120	0.109	0.129
25	0.096	0.063	0.349	0.619	1.063	0.064	0.061	0.064	0.375	0.144	0.098	0.116
26	0.084	0.062	0.299	0.662	0.516	0.061	0.057	0.061	0.480	0.133	0.120	0.126
27	0.082	0.185	0.185	0.463	0.296	0.061	0.059	0.062	0.148	0.114	0.148	0.182
28	0.075	0.184	0.145	0.222	0.185	0.060	0.055	0.064	0.087	0.092	0.178	0.988
29	0.072		0.369	0.172	0.141	0.064	0.054	0.063	0.095	0.082	0.143	2.238
30	0.067		0.669	0.151	0.115	0.068	0.056	0.061	0.597	0.213	0.173	1.015
31	0.065		0.606		0.106		0.956	0.064		0.114		0.449
Average	0.127	0.081	0.361	0.214	0.246	0.089	0.119	0.093	0.203	0.170	0.151	0.371
Lowest	0.052	0.060	0.134	0.108	0.088	0.060	0.054	0.061	0.048	0.068	0.078	0.097
Highest	0.380	0.185	1.108	0.662	1.063	0.234	0.956	0.525	0.992	0.865	0.512	2.238
Peak flow	1.427	0.934	3.156	1.679	3.523	1.789	6.408	4.992	3.884	3.996	2.016	3.670
Day of peak	9	27	2	10	15	6	31	6	19	20	16	29
Monthly total (million cu m)	0.33	0.20	0.97	0.55	0.66	0.23	0.32	0.25	0.53	0.46	0.39	0.99
Runoff (mm)	15	9	45	26	31	11	15	12	25	21	18	46
Rainfall (mm)	33	15	86	43	67	23	60	27	113	61	40	63

Statistics of monthly data for previous record (Oct 1955 to Dec 1980 — incomplete or missing months total 0.4 years)

Mean	Avg	0.314	0.330	0.256	0.190	0.181	0.121	0.112	0.124	0.117	0.142	0.217	0.254
flows	Low	0.059	0.062	0.054	0.074	0.073	0.067	0.060	0.034	0.056	0.043	0.057	0.092
	(year)	1973	1973	1973	1974	1974	1973	1977	1976	1969	1972	1978	1973
	High	0.470	0.883	0.468	0.385	0.420	0.249	0.210	0.194	0.294	0.332	0.794	0.507
	(year)	1978	1977	1979	1966	1978	1971	1968	1977	1974	1974	1974	1965
Runoff	Avg	39	38	32	23	23	15	14	15	14	18	26	32
	Low	7	7	7	9	9	8	8	4	7	5	7	11
	High	59	100	59	47	53	30	26	24	36	42	96	64
Rainfall	Avg	54	42	49	39	52	48	44	57	54	49	63	52
(1967-1980)	Low	14	12	10	13	16	19	14	2	9	3	18	21
	High	91	84	92	58	98	90	90	131	136	114	152	115

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	0.186	0.196	95
Lowest yearly mean		0.095	1973
Highest yearly mean		0.241	1979
Lowest monthly mean	0.081	0.034	Aug 1976
Highest monthly mean	0.371	0.883	Feb 1977
Lowest daily mean	0.048	0.025	5 Sep 1976
Highest daily mean	2.238	5.369	5 May 1978
Peak	6.408	11.700	30 May 1979
10 %ile	0.384	0.409	94
50 %ile	0.111	0.103	109
95 %ile	0.060	0.046	132
Annual total (million cu m)	5.87	6.18	95
Annual runoff (mm)	274	289	95
Annual rainfall (mm)	631	603	105
[1941-70 rainfall average (mm)]		613	

Factors affecting flow regime**Station description**

Rectangular critical depth flume Crump weir installed for low flow measurement in 1965 removed 1980

039001 Thames at Kingston

1981

Measuring authority: TWA
First year: 1975

Grid reference: TQ 177698
Level stn. (m OD) 1.05

Catchment area (sq km) 9948.0
5.0 Max alt. (m OD) 330

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	58 500	46 800	55 900	215 000	85 100	84 600	33 100	55 000	12 100	98 800	71 400	63 800
2	55 100	47 200	137 000	215 000	70 200	176 000	30 600	33 000	12 700	88 900	67 000	50 700
3	51 000	50 100	212 000	177 000	70 500	192 000	30 200	33 700	13 600	64 100	61 100	49 900
4	47 800	56 200	177 000	119 000	80 600	125 000	28 800	22 500	11 500	61 500	47 600	52 700
5	46 900	57 500	128 000	116 000	77 600	88 800	30 600	21 600	9 870	52 200	51 700	48 700
6	49 600	43 400	107 000	101 000	70 500	84 900	27 700	104 000	9 540	74 200	43 200	52 100
7	51 600	41 500	102 000	98 400	64 200	72 900	26 600	106 000	8 810	92 800	41 700	57 800
8	57 000	43 500	162 000	92 700	67 000	80 500	26 300	59 100	9 430	57 600	40 700	101 000
9	55 200	44 800	198 000	81 000	59 800	71 100	23 400	46 800	9 430	63 100	43 300	113 000
10	58 600	48 400	223 000	91 400	75 100	65 300	23 200	46 300	7 440	62 900	40 800	89 800
11	63 600	49 000	244 000	86 100	76 700	70 400	20 200	41 800	11 100	62 800	40 900	82 300
12	62 100	49 100	255 000	83 600	68 700	69 600	23 500	19 200	20 800	62 600	40 100	67 500
13	58 800	46 200	252 000	79 800	55 100	59 900	21 000	21 700	19 600	45 900	38 800	69 600
14	59 500	41 900	264 000	104 000	52 700	54 400	17 700	23 500	15 800	50 200	36 400	214 000
15	80 900	39 400	251 000	95 900	55 300	52 700	20 800	22 000	24 900	50 900	32 500	296 000
16	88 100	38 500	234 000	68 000	72 200	49 100	20 900	19 200	18 400	50 600	38 500	262 000
17	92 900	30 600	199 000	70 200	74 900	49 000	17 900	16 700	13 400	53 000	58 700	212 000
18	102 000	30 800	140 000	64 600	77 300	45 400	19 000	15 300	19 400	68 400	82 100	130 000
19	95 500	31 100	120 000	57 500	78 100	45 800	20 800	13 800	29 500	63 000	83 300	98 600
20	91 000	30 400	108 000	61 600	83 900	44 400	21 600	14 100	84 900	118 000	104 000	92 400
21	92 200	24 400	98 900	60 900	104 000	48 200	21 000	16 500	47 300	162 000	124 000	138 000
22	96 400	26 000	157 000	60 300	83 200	38 300	34 300	16 500	41 100	129 000	109 000	143 000
23	94 200	33 700	187 000	57 000	73 100	40 800	37 700	16 400	20 500	86 000	83 900	114 000
24	78 700	39 700	184 000	56 300	91 700	38 700	37 100	14 900	22 500	75 500	75 900	84 300
25	70 400	39 100	183 000	62 800	155 000	39 100	29 700	14 300	33 000	76 600	56 500	88 600
26	61 100	40 300	182 000	112 000	247 000	33 800	27 900	12 100	114 000	90 500	60 000	82 000
27	60 200	38 500	143 000	164 000	249 000	35 900	20 600	14 200	143 000	74 600	55 700	77 500
28	55 400	37 600	114 000	173 000	194 000	34 300	18 100	13 100	29 700	70 100	77 900	96 800
29	55 100	117 000	153 000	156 000	35 300	21 900	12 000	55 000	65 500	67 500	204 000	
30	54 100	127 000	121 000	106 000	33 300	19 500	11 700	81 900	63 100	71 400	287 000	
31	47 300	191 000		91 800		25 100	11 500		68 900		251 000	
Average	67 380	40 970	169 400	103 300	95 530	65 320	25 060	28 660	33 340	74 300	61 520	121 400
Lowest	46 900	24 400	55 900	56 300	52 700	33 300	17 700	11 500	7 440	45 900	32 500	48 700
Highest	102 000	57 500	264 000	215 000	249 000	192 000	37 700	106 000	143 000	162 000	124 000	296 000
Peak flow	114 000	96 400	282 000	240 000			61 800	142 000	166 000	184 000	141 000	337 000
Day of peak	19	8	12	1			22	6	27	21	21	15
Monthly total (million cu m)	180.50	98.99	453.80	267.70	255.90	169.30	67.12	76.77	86.42	199.00	159.50	325.20
Runoff (mm)	18	10	46	27	26	17	7	8	9	20	16	33
Rainfall (mm)	38	24	129	48	95	36	45	47	125	80	42	85

Statistics of monthly data for previous record (Jan 1883 to Dec 1980)

Mean flows	Avg	127 400	125 700	105 100	74 460	53 320	36 840	23 900	22 340	23 990	38 410	73 190	101 800
	Low	18 570	12 290	9 426	8 975	4 391	3 302	2 080	1 912	0 688	3 157	7 484	10 210
	(year)	1976	1976	1976	1976	1976	1976	1971	1976	1976	1934	1921	1933
	High	325 300	342 000	359 500	188 800	171 700	171 600	72 280	79 330	123 900	179 800	334 000	333 900
	(year)	1915	1904	1947	1916	1932	1903	1968	1931	1927	1903	1894	1929
Runoff	Avg	34	31	28	20	14	10	7	6	6	11	19	27
	Low	7	4	4	5	2	2	1	1	1	1	2	3
	High	88	86	97	49	46	45	19	21	32	48	87	90
Rainfall	Avg	65	50	51	48	53	52	59	65	57	72	73	72
	Low	18	3	3	3	8	3	8	3	3	5	8	13
	High	137	127	142	104	137	137	130	147	157	188	188	185

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	74 200	66 930	111
Lowest yearly mean		70 410	1934
Highest yearly mean		120 000	1951
Lowest monthly mean	25 060	0 688	Sep 1976
Highest monthly mean	169 400	359 500	Mar 1947
Lowest daily mean	7 440	0 010	11 Oct 1976
Highest daily mean	296 000	1059 000	18 Nov 1894
Peak	337 000		
10 %ile	155 900	163 000	96
50 %ile	59 430	41 850	142
95 %ile	13 900	9 144	152
Annual total (million cu m)	2340.00	2112.00	111
Annual runoff (mm)	235	212	111
Annual rainfall (mm)	794	717	111
[1941-70 rainfall average (mm)]		682]	

Factors affecting flow regime

● Abstraction for public water supplies

Station description

Ultrasonic gauging station installed 1975. Earlier data derived from the Teddington gauging station - a low flow gauging weir with adjustable crest 21.3 m broad, two roller sluices each 10.7 m broad, 35 vertically lifting gates total breadth, 68.2 m, and 34 radial gates each 3.07 m broad. Naturalised flows are determined by taking account of abstractions for public water supply.

039001 Thames at Kingston**1981**Measuring authority TWA
First year 1975Grid reference TQ 177698
Level stn (m OD) 1.06Catchment area (sq km) 9948.0
5.0 Max alt (m OD) 330**Daily mean naturalised discharges (cubic metres per second)**

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	73 100	67 000	83 100	228 000	104 000	99 200	52 600	72 200	31 700	113 000	85 400	82 800
2	71 700	86 200	159 000	227 000	86 200	197 000	50 700	50 800	31 000	104 000	84 000	72 400
3	67 600	68 300	232 000	192 000	87 300	209 000	50 700	52 200	31 700	80 300	76 600	66 600
4	65 700	79 100	196 000	135 000	96 700	142 000	48 700	42 500	30 900	77 600	63 600	69 100
5	65 200	81 100	139 000	137 000	93 400	106 000	48 900	40 600	29 000	72 100	68 100	68 800
6	68 500	83 000	127 000	117 000	84 000	102 000	45 600	120 000	29 200	93 300	61 100	69 400
7	69 300	60 200	128 000	115 000	81 800	91 100	45 500	125 000	29 600	111 000	61 800	72 400
8	74 300	62 700	189 000	109 000	78 200	93 400	46 600	79 100	30 300	75 400	61 000	116 000
9	74 000	63 200	216 000	96 300	77 600	89 100	45 100	67 600	29 700	79 100	60 600	127 000
10	75 700	65 700	242 000	105 000	92 800	82 000	43 500	64 400	28 300	79 100	57 100	104 000
11	82 300	67 800	267 000	101 000	97 100	90 300	39 800	60 600	31 300	78 900	57 800	98 900
12	80 300	67 300	277 000	97 900	89 900	87 100	44 900	36 500	39 100	78 600	57 500	87 000
13	76 700	63 500	273 000	96 000	74 000	78 300	42 800	40 100	37 700	63 800	57 200	90 100
14	76 800	61 000	289 000	170 000	71 400	73 800	41 200	41 500	38 500	67 200	55 400	230 000
15	99 400	56 700	274 000	114 000	77 700	70 300	43 700	40 800	48 600	67 800	53 100	314 000
16	107 000	59 900	253 000	84 900	92 300	69 300	40 800	38 600	41 300	66 700	56 600	279 000
17	111 000	55 500	218 000	85 100	91 200	67 600	41 600	37 000	36 300	69 600	73 700	228 000
18	121 000	55 300	160 000	80 900	93 100	65 400	42 000	37 700	39 900	85 700	96 800	145 000
19	112 000	54 500	139 000	74 200	92 200	66 300	41 600	37 600	49 600	81 300	97 600	116 000
20	109 000	56 300	127 000	76 500	100 000	64 400	41 400	37 400	104 000	136 000	121 000	110 000
21	109 000	53 100	117 000	75 100	122 000	64 200	40 300	36 200	67 300	179 000	146 000	156 000
22	113 000	53 800	173 000	75 300	102 000	59 800	55 700	36 400	61 800	147 000	131 000	162 000
23	111 000	58 100	208 000	73 100	90 400	61 000	55 400	36 100	40 100	107 000	97 900	132 000
24	95 600	60 100	204 000	72 400	111 000	61 700	55 300	35 100	42 700	92 600	90 400	101 000
25	86 100	59 200	204 000	79 500	177 000	61 000	48 000	34 900	51 900	94 100	72 000	102 000
26	78 800	61 000	203 000	128 000	266 000	57 100	47 400	32 800	131 000	107 000	75 600	99 300
27	77 500	61 000	161 000	183 000	267 000	57 700	39 300	34 300	162 000	90 900	74 800	94 800
28	72 500	64 800	131 000	194 000	212 000	57 400	37 800	32 700	98 300	85 500	100 000	111 000
29	71 800		135 000	174 000	171 000	54 700	39 400	32 400	73 600	80 300	89 500	218 000
30	71 700		145 000	140 000	122 000	50 700	37 500	32 200	101 000	81 400	87 700	295 000
31	67 500		204 000		108 000		44 500	30 300		82 100		264 000
Average	85 000	62 340	189 500	119 400	113 200	84 110	45 090	48 250	53 250	91 050	79 030	138 100
Lowest	65 200	53 100	83 100	72 400	71 400	50 700	37 500	30 300	28 300	63 800	53 100	66 600
Highest	121 000	81 100	289 000	278 000	267 000	209 000	55 700	125 000	162 000	179 000	146 000	314 000

Monthly total (million cu m) 227.70 150.80 507.40 309.40 303.20 218.00 120.80 129.20 138.00 243.90 204.80 369.90

Nat'ised runoff (mm) 23 15 51 31 30 22 12 13 14 25 21 37
Rainfall (mm) 38 24 129 48 95 36 13 80 85

Statistics of monthly data for previous record (Jan 1883 to Dec 1980)

Mean	Avg	137 500	135 900	115 300	84 780	63 870	47 560	34 750	32 220	34 190	48 960	83 430	111 800
naturalised	Low	32 200	25 080	27 340	26 520	18 200	13 470	10 770	11 030	11 250	15 120	17 730	22 470
flows	(year)	1905	1905	1944	1976	1944	1944	1921	1976	1898	1934	1921	1921
	High	332 900	348 100	370 900	199 800	181 300	178 700	88 840	88 770	139 400	185 300	339 600	343 900
	(year)	1915	1904	1947	1951	1932	1903	1968	1931	1968	1903	1894	1929
Nat'ised	Avg	37	33	31	22	17	12	9	9	9	13	22	30
runoff	Low	9	6	7	7	5	4	3	3	3	4	5	6
	High	90	88	100	52	49	47	24	24	36	50	88	93
Rainfall	Avg	65	50	51	48	53	52	59	65	57	72	73	72
	Low	18	3	3	3	8	3	8	3	3	5	8	13
	High	137	127	142	104	137	137	130	147	157	188	188	185

Summary statistics
(naturalised flows)

	For 1981	For record preceding 1981	1981 As % of pre 1981
Mean flow (m ³ s ⁻¹)	97 690	77 250	120
Lowest yearly mean		30 940	1934
Highest yearly mean		131 800	1951
Lowest monthly mean	45 090	10 770	Jul 1921
Highest monthly mean	189 500	370 900	Mar 1947
Lowest daily mean	28 300	7 370	9 Jul 1934
Highest daily mean	314 000	1065 000	18 Nov 1894
10 %ile	175 600	173 400	101
50 %ile	77 210	52 340	148
95 %ile	35 460	18 010	197
Annual total (million cu m)	2923.00	2438.00	120
Annual runoff (mm)	294	245	120
Annual rainfall (mm)	794	717	111
[1941-70 rainfall average (mm)]		687]	

Factors affecting flow regime

● Abstraction for public water supplies

Station description

Ultrasonic gauging station installed 1975. Earlier data derived from the Teddington gauging station: a low flow gauging weir with adjustable crest 21.3 m broad, two roller sluices each 10.7 m broad, 35 vertically lifting gates total breadth 68.2 m, and 34 radial gates each 3.07 m broad. Naturalised flows are determined by taking account of abstractions for public water supply.

039007 Blackwater at Swallowfield

1981

Measuring authority: TWA
First year: 1952

Grid reference: SU 731648
Level stn. (m OD) 42.28

Catchment area (sq km) 354.8
Max alt. (m OD): 225

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2 430	2 420	3 800	9 630	3 270	3 630	1 800	4 380	1 430	5 750	2 890	2 920
2	2 450	2 560	9 840	5 960	2 970	13 400	1 780	2 460	1 420	3 870	2 760	2 770
3	2 460	3 400	11 700	4 670	3 190	7 170	1 760	1 890	1 420	3 130	2 660	2 660
4	2 380	2 820	5 890	4 030	3 480	4 590	1 730	1 750	1 390	2 660	2 870	2 700
5	2 320	2 590	4 740	3 710	3 150	3 720	1 700	1 720	1 380	2 470	2 590	2 660
6	2 950	2 470	5 040	3 470	3 000	3 330	1 680	6 470	1 400	5 300	2 570	2 650
7	3 050	2 420	5 390	3 250	2 770	3 090	1 610	5 660	1 440	4 940	2 510	3 130
8	2 720	2 400	7 110	3 120	2 810	3 050	1 630	3 110	1 430	3 270	2 440	6 450
9	3 240	2 460	9 110	2 940	3 500	2 890	1 620	2 570	1 400	3 800	2 350	4 230
10	3 260	2 370	10 100	3 020	3 800	2 820	1 600	2 240	1 380	3 730	2 300	3 520
11	2 900	2 350	10 600	3 590	3 190	3 630	1 580	2 020	1 730	3 530	2 300	3 510
12	2 950	2 330	7 910	2 990	2 810	3 040	1 590	1 930	2 850	3 770	2 280	3 240
13	2 930	2 270	9 470	2 840	2 630	2 650	1 580	1 820	1 860	3 100	2 190	6 320
14	4 700	2 290	7 390	7 600	2 480	2 420	1 570	1 740	1 860	2 830	2 250	21 000
15	3 860	2 260	6 820	4 160	2 820	2 300	1 460	1 690	2 890	3 260	2 180	13 000
16	3 980	2 240	5 050	3 330	3 680	2 230	1 520	1 570	1 980	2 920	2 660	6 950
17	3 900	2 250	4 430	2 930	3 330	2 160	1 560	1 530	1 800	2 870	4 440	5 010
18	3 800	2 300	3 990	2 610	3 140	2 160	1 560	1 490	2 120	3 680	4 430	4 010
19	3 780	2 310	3 650	2 530	3 300	2 170	1 490	1 480	4 300	3 180	5 150	3 510
20	3 650	2 200	3 430	2 430	4 620	2 090	1 450	1 570	7 760	9 250	5 660	6 480
21	4 610	2 230	4 440	2 360	3 410	1 990	1 450	1 530	3 710	5 140	4 090	8 520
22	3 890	2 430	6 900	2 460	3 050	1 980	3 280	1 540	2 390	3 750	3 550	6 500
23	3 490	2 270	5 640	2 470	3 490	1 940	4 140	1 490	2 160	3 230	3 240	5 000
24	3 320	2 170	4 800	2 560	3 990	2 000	3 070	1 460	2 490	3 020	3 040	4 310
25	3 060	2 170	5 190	3 750	15 400	1 960	2 240	1 470	2 960	3 550	2 830	3 810
26	2 890	2 170	5 190	7 480	13 300	1 970	1 940	1 460	11 900	3 490	2 830	3 630
27	2 760	2 390	4 170	7 810	6 640	1 970	1 730	1 440	5 630	3 190	3 980	4 320
28	2 660	3 410	3 680	4 710	5 270	1 890	1 730	1 440	3 540	3 040	3 820	5 880
29	2 640		3 850	3 930	4 240	1 830	1 650	1 490	3 000	3 410	3 230	14 500
30	2 540		6 220	3 680	3 790	1 870	1 540	1 390	5 290	3 240	3 190	10 200
31	2 470		9 750		3 600		2 880	1 340		3 290		6 520
Average	3 146	2 427	6 300	4 001	4 197	3 063	1 868	2 101	2 860	3 731	3 108	5 802
Lowest	2 320	2 170	3 430	2 360	2 480	1 830	1 450	1 340	1 380	2 470	2 180	2 650
Highest	4 610	3 410	11 700	9 630	15 400	13 400	4 140	6 470	11 900	9 250	5 660	21 000
Peak flow	4 930	3 940	15 900	12 000	20 500	15 400	6 970	9 090	14 300	12 300	6 590	21 700
Day of peak	21	28	2	1	25	2	31	6	26	20	20	14
Monthly total (million cu m)	8 43	5 87	16 87	10 37	11 24	7 94	5 00	5 63	7 41	9 99	8 06	15 54
Runoff (mm)	24	17	48	29	32	22	14	16	21	28	23	44
Rainfall (mm)	35	21	125	49	88	42	59	33	131	77	41	90

Statistics of monthly data for previous record (Oct 1952 to Dec 1980)

Mean flows	Avg	4 626	4 165	3 688	2 915	2 416	1 886	1 410	1 459	1 788	2 416	3 326	3 878
	Low	1 758	1 687	1 323	1 521	1 081	0 767	0 711	0 723	0 638	0 907	1 262	1 298
	(year)	1954	1965	1953	1976	1956	1953	1959	1959	1959	1964	1964	1953
	High	8 000	7 297	6 898	5 600	5 946	6 477	2 316	2 627	6 609	7 613	8 019	7 022
	(year)	1975	1966	1979	1966	1978	1971	1968	1977	1968	1960	1960	1960
Runoff	Avg	35	29	28	21	18	14	11	11	13	18	24	29
	Low	13	12	10	11	8	6	5	5	5	7	9	10
	High	60	50	52	41	45	47	17	20	48	57	59	53
Rainfall	Avg	67	46	50	45	52	52	56	62	66	68	74	72
	Low	15	5	3	8	8	5	18	17	3	6	18	18
	High	124	108	114	106	128	144	104	117	167	208	179	167

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre 1981
Mean flow (m ³ s ⁻¹)	3 563	2 825	126
Lowest yearly mean		1 466	1953
Highest yearly mean		3 730	1979
Lowest monthly mean	1 868	0 638	Sep 1959
Highest monthly mean	6 300	8 019	Nov 1960
Lowest daily mean	1 340	0 464	18 Aug 1953
Highest daily mean	21 000	39 700	16 Sep 1968
Peak	21 700	41 000	16 Sep 1968
10 %ile	6 227	5 417	115
50 %ile	2 952	2 028	146
95 %ile	1 467	0 842	174
Annual total (million cu m)	112 40	89 16	126
Annual runoff (mm)	317	251	126
Annual rainfall (mm)	791	710	111
[1941-70 rainfall average (mm)]		708]	

Factors affecting flow regime

● Augmentation from effluent returns

Station description

Critical depth flume and side weir 9 m broad 1970 onwards 2 Crump weirs, main 4.57 m broad, side 2.7 m broad

039020 Coln at Bibury

1981

Measuring authority TWA
First year 1963
Grid reference SP 122062
Level stn (m OD) 100.65
Catchment area (sq km) 106.7
Max alt (m OD) 330

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1 860	1 510	1 350	3 100	2 060	1 990	1 300	0 861	0 634	0 823	1 290	1 320
2	1 860	1 520	1 430	2 960	2 060	2 090	1 270	0 848	0 605	0 836	1 270	1 330
3	1 810	1 570	1 450	2 880	2 100	2 050	1 270	0 832	0 601	0 852	1 270	1 350
4	1 780	1 520	1 400	2 830	2 090	2 010	1 240	0 812	0 592	0 873	1 260	1 340
5	1 750	1 490	1 470	2 780	2 030	2 010	1 210	0 821	0 587	0 888	1 250	1 350
6	1 710	1 470	1 560	2 720	2 010	2 040	1 180	0 866	0 587	0 921	1 240	1 370
7	1 670	1 440	1 750	2 710	1 980	2 040	1 180	0 875	0 587	0 949	1 230	1 410
8	1 630	1 440	1 780	2 680	1 930	2 000	1 160	0 838	0 591	0 960	1 210	1 410
9	1 650	1 460	1 830	2 600	1 920	1 950	1 160	0 819	0 583	0 967	1 200	1 380
10	1 610	1 430	2 050	2 460	1 920	1 940	1 140	0 809	0 589	1 020	1 190	1 350
11	1 560	1 400	2 280	2 410	1 860	1 930	1 120	0 787	0 595	1 030	1 180	1 330
12	1 550	1 380	2 490	2 340	1 830	1 880	1 110	0 770	0 599	1 030	1 170	1 260
13	1 520	1 350	2 690	2 270	1 790	1 860	1 090	0 766	0 593	1 030	1 150	1 260
14	1 560	1 340	2 860	2 240	1 740	1 810	1 070	0 759	0 620	1 040	1 140	1 360
15	1 560	1 320	2 900	2 190	1 720	1 780	1 060	0 749	0 614	1 060	1 130	1 510
16	1 520	1 310	2 900	2 140	1 740	1 740	1 060	0 733	0 600	1 040	1 140	1 550
17	1 520	1 290	2 880	2 110	1 730	1 700	1 050	0 685	0 601	1 020	1 140	1 620
18	1 490	1 270	2 910	2 060	1 740	1 680	1 040	0 748	0 618	1 030	1 160	1 680
19	1 510	1 260	2 820	2 020	1 750	1 650	1 030	0 742	0 667	1 060	1 180	1 720
20	1 510	1 260	2 770	1 980	1 790	1 620	1 010	0 740	0 679	1 180	1 220	1 790
21	1 520	1 250	3 150	1 930	1 780	1 570	1 000	0 719	0 659	1 200	1 190	1 900
22	1 530	1 260	3 230	1 920	1 740	1 540	1 010	0 721	0 668	1 170	1 190	1 790
23	1 520	1 250	3 250	1 870	1 790	1 480	1 010	0 687	0 664	1 190	1 200	1 750
24	1 530	1 270	3 270	1 870	1 770	1 440	0 975	0 705	0 675	1 230	1 250	1 710
25	1 560	1 220	3 350	1 850	1 840	1 430	0 943	0 684	0 686	1 310	1 260	1 680
26	1 570	1 210	3 340	1 930	1 930	1 410	0 927	0 658	0 741	1 270	1 290	1 650
27	1 530	1 220	3 360	2 060	1 890	1 380	0 907	0 656	0 740	1 290	1 340	1 640
28	1 540	1 330	3 340	2 080	1 890	1 350	0 889	0 654	0 728	1 290	1 360	1 760
29	1 530		3 320	2 120	1 930	1 340	0 880	0 652	0 748	1 320	1 350	2 260
30	1 530		3 290	2 090	1 950	1 310	0 867	0 643	0 791	1 320	1 340	2 370
31	1 510		3 140		1 960		0 876	0 648		1 310		2 670
Average	1 597	1 357	2 568	2 307	1 879	1 734	1 066	0 751	0 641	1 081	1 226	1 608
Lowest	1 490	1 210	1 350	1 850	1 720	1 310	0 867	0 643	0 583	0 823	1 130	1 260
Highest	1 860	1 570	3 360	3 100	2 100	2 090	1 300	0 875	0 791	1 320	1 360	2 670
Peak flow	1 920	1 680	3 470	3 200	2 320	2 160	1 330	0 909	0 859	1 470	1 410	2 790
Day of peak	1	3	28	1	6	2	3	7	25	29	18	31
Monthly total (million cu m)	4 28	3 28	6 88	5 98	5 03	4 50	2 85	2 01	1 66	2 90	3 18	4 31
Runoff (mm)	40	31	64	56	47	42	27	19	16	27	30	40
Rainfall (mm)	38	38	126	55	92	40	39	55	149	72	44	107

Statistics of monthly data for previous record (Oct 1963 to Dec 1980)

Mean	Avg	1 955	2 379	2 204	1 742	1 260	1 104	0 847	0 679	0 589	0 643	0 974	1 518
flows	Low	0 374	0 380	0 383	0 371	0 334	0 290	0 243	0 207	0 202	0 259	0 344	0 375
	(year)	1976	1976	1976	1976	1976	1976	1976	1976	1976	1976	1973	1975
	High	3 114	3 616	3 385	3 415	2 206	2 290	1 372	1 032	0 908	1 299	2 714	3 016
	(year)	1968	1977	1977	1979	1966	1979	1977	1968	1968	1968	1967	1965
Runoff	Avg	49	54	55	42	32	27	21	7	14	16	24	38
	Low	9	9	10	9	8	7	6	5	5	7	8	9
	High	78	82	85	83	55	56	34	26	22	33	66	76
Rainfall	Avg	76	64	65	49	68	61	62	72	67	58	75	88
	Low	18	8	19	5	24	9	15	23	17	8	34	25
	High	126	159	143	90	161	155	120	149	149	171	163	159

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	1 486	1 319	113
Lowest yearly mean		0 400	1976
Highest yearly mean		1 771	1966
Lowest monthly mean	0 641 Sep	0 202 Sep 1976	
Highest monthly mean	2 568 Mar	3 616 Feb 1977	
Lowest daily mean	0 583 9 Sep	0 190 23 Aug 1976	
Highest daily mean	3 360 27 Mar	4 870 22 Dec 1965	
Peak	3 470 28 Mar	5 000 22 Dec 1965	
10 %ile	2 257	2 598	87
50 %ile	1 363	1 038	131
95 %ile	0 640	0 371	173
Annual total (million cu m)	46 86	41 63	113
Annual runoff (mm)	439	390	113
Annual rainfall (mm)	855	805	106
[1941-70 rainfall average (mm)]		823	

Factors affecting flow regime

- Flow influenced by groundwater abstraction and/or recharge

Station description
Crump weir 9.1 m broad

040005 Beult at Stile Bridge

1981

Measuring authority: SWA
First year: 1958

Grid reference: TQ 758478
Level stn. (m OD) 11.49

Catchment area (sq km): 277.1
Max ali. (m OD): 160

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0 832	0 627	7 813	7 473	0 517	1 222	0 303	0 280	0 102	0 920	2 268	0 773
2	0 783	0 621	9 330	3 948	0 452	2 470	0 283	0 278	0 097	0 575	1 582	0 674
3	0 824	0 878	11 030	1 691	0 546	1 257	0 274	0 173	0 092	0 731	1 205	0 624
4	0 687	0 884	5 761	1 038	1 388	0 718	0 265	0 154	0 090	1 999	1 024	0 665
5	0 542	0 679	3 029	0 819	0 858	0 562	0 235	0 139	0 084	1 174	0 956	0 656
6	0 516	0 569	2 053	0 684	0 599	0 488	0 222	0 181	0 084	3 412	0 814	0 680
7	0 473	0 550	3 862	0 552	0 522	0 445	0 197	0 516	0 084	6 328	0 710	0 790
8	0 448	0 537	8 672	0 452	0 525	0 432	0 186	0 362	0 155	1 758	0 606	8 125
9	0 570	0 561	11 140	0 374	1 715	0 332	0 288	0 252	0 090	1 482	0 543	6 381
10	0 991	0 541	14 410	0 352	4 254	0 346	0 378	0 209	0 083	1 351	0 514	2 298
11	0 802	0 468	10 700	0 562	2 708	0 363	0 299	0 176	0 083	1 785	0 509	7 513
12	0 841	0 474	5 537	0 450	1 150	0 345	0 260	0 151	0 087	2 250	0 440	8 199
13	0 881	0 440	3 358	0 331	0 728	0 324	0 227	0 131	0 089	2 350	0 395	5 415
14	1 563	0 393	4 713	0 303	0 552	0 311	0 196	0 122	0 106	1 244	0 366	29 700
15	3 471	0 371	3 311	0 293	0 631	0 304	0 172	0 123	0 190	1 073	0 359	22 790
16	1 853	0 371	3 973	0 518	3 264	0 290	0 177	0 108	0 183	1 347	0 387	6 206
17	2 379	0 362	2 942	0 481	1 197	0 278	0 168	0 103	0 153	5 497	3 717	2 821
18	1 593	0 381	2 421	0 424	2 204	0 263	0 177	0 097	0 128	13 260	3 568	1 699
19	1 524	0 381	1 821	0 409	6 386	0 268	0 191	0 095	0 266	5 674	8 259	1 175
20	1 230	0 385	1 414	0 413	2 469	0 275	0 178	0 124	1 140	9 025	7 523	1 090
21	2 125	0 391	1 246	0 346	6 173	0 280	0 176	0 124	0 667	6 048	4 355	1 573
22	4 128	0 441	1 480	0 296	3 858	0 237	0 233	0 115	0 402	2 375	2 536	2 347
23	2 260	0 932	2 649	0 286	5 986	0 212	0 293	0 117	0 300	1 354	1 951	2 407
24	1 743	0 832	3 307	0 320	7 804	0 415	0 329	0 116	0 330	1 273	1 554	2 162
25	1 375	0 582	3 307	0 537	3 895	0 492	0 278	0 110	5 773	7 240	1 079	2 462
26	1 058	0 521	6 406	0 704	2 973	0 454	0 237	0 107	8 616	5 475	0 774	2 192
27	0 898	0 537	3 744	0 645	1 625	0 676	0 246	0 103	10 050	3 658	0 877	5 675
28	0 826	7 070	2 024	0 556	1 138	0 668	0 201	0 106	2 435	2 599	0 908	12 930
29	0 804		1 479	0 583	0 892	0 406	0 177	0 097	0 934	5 235	0 773	17 610
30	0 742		4 869	0 579	1 004	0 314	0 152	0 092	0 641	4 092	0 758	11 700
31	0 678		14 700		2 316		0 167	0 096		3 605		5 660
Average	1 272	0 778	5 226	0 881	2 269	0 514	0 231	0 158	1 118	3 425	1 710	5 645
Lowest	0 448	0 362	1 246	0 286	0 452	0 212	0 152	0 092	0 083	0 575	0 359	0 624
Highest	4 128	7 070	14 410	7 473	7 804	2 470	0 378	0 516	10 050	13 260	8 259	29 700
Peak flow	4 933	10 620	18 870	8 231	10 490	3 529	0 404	0 634	14 860	14 760	9 111	36 310
Day of peak	22	28	31	1	23	2	10	7	27	18	19	14
Monthly total (million cu m)	3 41	1 88	14 00	2 28	6 08	1 33	0 62	0 42	2 90	9 17	4 43	15 12
Runoff (mm)	12	7	51	8	27	5	7	7	10	33	16	55
Rainfall (mm)	26	20	91	30	84	43	44	21	113	92	33	79

Statistics of monthly data for previous record (Oct 1958 to Dec 1980—incomplete or missing months total 0.3 years)

Mean flows	Avg	4 946	3 804	3 019	1 596	1 059	0 588	0 261	0 338	0 605	1 829	3 413	3 994
	Low	0 733	0 707	0 333	0 180	0 114	0 045	0 028	0 005	0 032	0 081	0 133	0 401
	(year)	1976	1959	1976	1976	1976	1976	1976	1976	1959	1969	1978	1971
	High	8 972	9 241	8 175	4 016	3 417	3 727	1 678	1 607	3 504	9 812	14 390	8 762
	(year)	1975	1966	1975	1966	1978	1964	1980	1966	1974	1960	1960	1959
Runoff	Avg	48	34	29	15	10	6	3	3	6	18	37	39
	Low	7	6	3	2	1	0	0	0	0	1	1	4
	High	87	81	79	38	33	35	16	16	33	95	135	85
Rainfall	Avg	65	46	52	47	47	49	51	54	66	67	83	74
	Low	13	1	0	10	13	5	12	16	3	5	14	24
	High	120	103	116	77	96	119	107	119	141	185	163	157

Summary statistics

Factors affecting flow regime

● Augmentation from effluent returns

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	1 955	2 115	92
Lowest yearly mean		1 120	1962
Highest yearly mean		3 938	1960
Lowest monthly mean	0 158 Aug	0 005 Aug 1976	
Highest monthly mean	5 645 Dec	14 390 Nov 1960	
Lowest daily mean	0 083 10 Sep	0 007 20 Aug 1978	
Highest daily mean	29 700 14 Dec	61 450 3 Nov 1960	
Peak	36 310 14 Dec	80 990 4 Nov 1960	
10 %ile	5 718	5 821	98
50 %ile	0 673	0 515	131
95 %ile	0 104	0 067	155
Annual total (million cu m)	61 65	66 75	92
Annual runoff (mm)	227	241	92
Annual rainfall (mm)	676	701	96
[1941-70 rainfall average (mm)]		681]	

Station description

Broad crested weir with low flow notch, and alternative velocity-area station for high flows 45 m upstream

041016 Cuckmere at Cowbeech

1981

Measuring authority: SWA
First year: 1967

Grid reference: TQ 611150
Level stn: (m OD) 29.78

Catchment area (sq km): 18.7
Max alt: (m OD): 183

Daily mean gauged discharges (cubic metres per second)												
DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.109	0.070	0.195	0.425	0.064	0.195	0.048	0.027	0.017	0.102	0.374	0.143
2	0.108	0.079	0.421	0.267	0.055	0.203	0.046	0.025	0.018	0.076	0.292	0.138
3	0.101	0.139	0.808	0.274	0.100	0.106	0.055	0.021	0.014	1.589	0.259	0.137
4	0.083	0.079	0.270	0.191	0.090	0.114	0.045	0.025	0.017	0.422	0.229	0.134
5	0.075	0.065	0.211	0.180	0.067	0.106	0.040	0.030	0.017	0.190	0.196	0.128
6	0.075	0.064	0.303	0.161	0.064	0.098	0.036	0.115	0.013	0.792	0.173	0.128
7	0.070	0.062	0.672	0.143	0.060	0.120	0.038	0.053	0.013	0.277	0.159	0.126
8	0.070	0.061	0.632	0.141	0.051	0.146	0.051	0.042	0.016	0.188	0.151	0.582
9	0.104	0.070	2.432	0.122	0.058	0.116	0.061	0.037	0.013	0.319	0.142	0.244
10	0.093	0.063	1.692	0.127	0.272	0.101	0.045	0.034	0.020	0.347	0.133	0.182
11	0.080	0.044	1.123	0.257	0.082	0.111	0.040	0.029	0.015	0.228	0.137	0.667
12	0.087	0.042	0.517	0.144	0.050	0.099	0.034	0.027	0.017	0.207	0.117	0.313
13	0.079	0.047	0.591	0.116	0.059	0.093	0.030	0.026	0.019	0.138	0.108	1.345
14	0.126	0.042	0.431	0.097	0.048	0.090	0.044	0.019	0.047	0.123	0.105	1.186
15	0.099	0.042	0.332	0.086	0.104	0.091	0.034	0.018	0.046	0.132	0.106	0.469
16	0.149	0.047	0.301	0.088	0.092	0.076	0.037	0.014	0.019	0.109	0.165	0.306
17	0.119	0.042	0.255	0.070	0.059	0.052	0.034	0.016	0.022	0.474	0.504	0.244
18	0.128	0.040	0.235	0.070	0.197	0.049	0.026	0.015	0.019	0.300	0.846	0.198
19	0.150	0.041	0.212	0.083	0.131	0.054	0.025	0.019	0.168	0.483	0.645	0.171
20	0.108	0.046	0.191	0.067	0.073	0.050	0.023	0.033	0.114	0.799	0.499	0.378
21	0.230	0.049	0.200	0.064	0.127	0.038	0.028	0.017	0.067	0.288	0.310	0.928
22	0.165	0.126	0.212	0.061	0.076	0.036	0.032	0.028	0.022	0.197	0.256	0.614
23	0.130	0.088	0.848	0.060	0.713	0.062	0.082	0.022	0.022	0.157	0.276	0.378
24	0.116	0.064	0.971	0.072	0.280	0.181	0.054	0.018	0.228	0.559	0.180	0.325
25	0.098	0.061	0.595	0.106	0.166	0.069	0.031	0.015	0.155	0.515	0.185	0.250
26	0.089	0.057	0.779	0.099	0.082	0.130	0.026	0.014	0.604	0.293	0.169	0.257
27	0.085	0.069	0.333	0.169	0.127	0.143	0.021	0.020	0.133	0.541	0.186	0.846
28	0.088	0.212	0.245	0.096	0.204	0.067	0.028	0.015	0.029	1.202	0.175	1.108
29	0.083	0.212	0.084	0.084	0.155	0.053	0.030	0.015	0.013	1.286	0.156	1.475
30	0.075	1.034	0.063	0.162	0.051	0.028	0.013	0.013	0.123	1.020	0.167	0.676
31	0.067	0.548		0.155		0.030	0.015			0.531		0.488
Average	0.105	0.068	0.574	0.131	0.130	0.097	0.038	0.026	0.068	0.448	0.245	0.470
Lowest	0.067	0.040	0.191	0.060	0.048	0.036	0.021	0.013	0.013	0.076	0.105	0.126
Highest	0.230	0.212	2.432	0.425	0.713	0.203	0.082	0.115	0.604	1.589	0.846	1.475
Peak flow	0.275	0.230	4.215	0.585	1.277	0.816	0.134	0.242	1.012	5.049	2.160	4.376
Day of peak	21	28	9	1	23	1	14	6	24	3	18	13
Monthly total (million cu m)	0.28	0.16	1.54	0.34	0.35	0.25	0.10	0.07	0.18	1.20	0.63	1.26
Runoff (mm)	15	9	82	18	19	13	5	4	9	64	34	67
Rainfall (mm)	29	26	137	37	97	49	33	31	135	152	45	94

Statistics of monthly data for previous record (Apr 1939 to Dec 1980—incomplete or missing months total 0.2 years)

Mean flows	Avg	0.225	0.223	0.166	0.117	0.086	0.053	0.039	0.038	0.054	0.080	0.164	0.165
	Low	0.084	0.089	0.045	0.027	0.018	0.009	0.013	0.009	0.011	0.014	0.013	0.030
	(year)	1963	1944	1944	1976	1976	1976	1976	1976	1964	1978	1973	1947
	High	0.785	0.755	0.461	0.299	0.196	0.393	0.322	0.154	0.394	0.482	0.854	0.560
	(year)	1975	1974	1975	1970	1978	1971	1980	1980	1974	1974	1974	1976
Runoff	Avg	32	29	24	16	12	7	6	5	7	11	23	24
	Low	12	12	6	4	3	1	2	1	2	2	2	4
	High	112	98	66	41	28	54	46	22	55	69	118	80
Rainfall	Avg	93	72	64	52	60	67	57	68	88	76	105	85
(1967-1980)	Low	25	29	22	10	21	12	15	7	9	5	19	21
	High	166	155	115	86	110	155	119	111	222	181	199	184

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre 1981
Mean flow (m ³ s ⁻¹)	0.202	0.117	173
Lowest yearly mean		0.050	1973
Highest yearly mean		0.278	1974
Lowest monthly mean	0.076	0.009	Jun 1976
Highest monthly mean	0.574	0.854	Nov 1974
Lowest daily mean	0.013	0.003	21 Jun 1976
Highest daily mean	2.432	8.487	4 Nov 1967
Peak	5.049	17.790	27 Dec 1979
10 %ile	0.524	0.219	239
50 %ile	0.105	0.077	138
95 %ile	0.017	0.014	128
Annual total (million cu m)	6.36	3.69	173
Annual runoff (mm)	340	197	173
Annual rainfall (mm)	865	887	98
[1941-70 rainfall average (mm)]		821]	

Factors affecting flow regime

- Flow influenced by groundwater abstraction and/or recharge
- Abstraction for public water supplies

Station description

Compound Crump weir, crest breadths 2.13 m and 2.97 m

042010 Itchen at Highbridge + Allbrook

1981

Measuring authority: SWA
First year: 1958

Grid reference SU 467213
Level sin. (m OD) 17.15

Catchment area (sq km) 360.0
Max alt. (m OD) 208

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	4 657	4 823	4 932	7 513	6 357	5 743	5 117	5 171	3 518	5 217	4 978	5 494
2	4 654	4 829	6 149	7 490	6 288	6 267	5 022	4 749	3 533	4 718	4 940	5 493
3	4 549	5 092	6 679	7 022	6 337	5 806	5 021	4 565	3 440	4 589	4 879	5 415
4	4 523	5 119	5 784	6 854	6 469	5 614	5 085	4 625	3 474	4 532	4 988	5 397
5	4 542	4 974	5 427	6 809	6 371	5 717	5 085	4 529	3 501	4 410	5 236	5 350
6	4 652	4 762	5 470	6 736	6 357	5 670	4 999	4 690	3 459	4 961	5 181	5 368
7	4 773	4 655	5 483	6 666	6 332	5 680	4 694	4 693	3 551	4 868	5 088	5 529
8	4 613	4 778	6 084	6 734	6 555	5 754	4 353	4 544	3 642	4 768	5 141	5 819
9	4 692	4 894	6 952	6 730	6 241	5 693	4 274	4 506	3 526	4 828	5 149	5 637
10	4 692	4 849	7 082	6 922	6 198	5 710	4 292	4 369	3 607	4 773	5 203	5 578
11	4 607	4 829	7 026	7 034	6 022	6 273	4 214	4 198	3 755	4 676	5 196	5 735
12	4 708	4 808	6 355	6 949	5 735	6 174	4 214	4 120	4 084	4 794	5 170	5 527
13	4 722	4 729	6 585	7 034	5 623	5 841	4 209	4 036	3 886	4 699	5 156	5 911
14	4 848	4 629	6 731	7 081	5 641	5 659	4 257	3 974	4 005	4 605	5 160	6 831
15	4 896	4 625	6 493	6 945	5 545	5 768	4 216	3 890	4 063	4 750	5 126	6 496
16	4 815	4 612	6 661	6 941	5 734	5 714	4 195	3 873	3 796	4 697	5 512	6 094
17	4 964	4 807	6 306	6 863	5 580	5 653	4 398	3 874	3 869	4 695	5 670	5 846
18	4 987	4 843	6 622	6 672	5 831	5 429	4 466	3 830	3 963	4 801	5 680	5 763
19	5 064	4 732	6 547	6 466	5 910	5 499	4 422	3 789	4 851	4 817	5 703	5 635
20	5 200	4 756	6 534	6 591	6 104	5 519	4 552	4 035	5 435	5 431	5 871	6 535
21	5 278	4 776	6 531	6 559	5 914	5 337	4 278	4 027	4 431	5 025	5 715	6 940
22	5 020	5 703	7 225	6 566	5 799	5 408	4 992	4 047	4 220	4 773	5 556	6 622
23	5 078	4 873	7 168	6 421	6 024	5 302	5 165	3 981	4 130	4 722	5 562	6 390
24	4 917	4 763	6 848	6 472	5 972	5 439	5 358	3 894	4 301	4 931	5 487	6 222
25	5 078	4 724	7 035	6 590	7 039	5 472	4 889	3 854	4 496	5 171	5 413	6 121
26	4 982	4 723	7 251	7 479	6 846	5 443	4 873	3 643	5 863	5 085	5 436	6 114
27	4 978	4 743	7 075	7 424	6 448	5 450	4 625	3 634	5 161	5 093	5 617	6 268
28	5 048	5 121	6 832	6 950	6 464	5 140	4 601	3 618	4 580	5 140	5 542	6 327
29	5 091		6 681	6 648	6 286	5 044	4 392	3 642	4 497	5 164	5 511	7 147
30	5 108		7 256	6 646	5 995	4 870	4 450	3 668	5 077	5 078	5 525	7 136
31	5 104		7 158		5 948		4 718	3 593		5 052		6 890
Average	4 866	4 824	6 547	6 860	6 128	5 601	4 627	4 118	4 124	4 866	5 346	6 053
Lowest	4 523	4 612	4 932	6 421	5 545	4 870	4 195	3 593	3 440	4 410	4 879	5 350
Highest	5 278	5 203	7 256	7 513	7 039	6 273	5 358	5 171	5 863	5 431	5 871	7 147

Peak flow

Day of peak

Monthly total

(million cu m)

Runoff (mm)

Rainfall (mm)

Statistics of monthly data for previous record (Oct 1958 to Dec 1980)

Mean flows	Avg	6 451	7 226	7 049	6 501	5 735	4 846	4 160	3 873	3 749	4 168	4 897	5 642
	Low	4 211	4 162	3 644	3 203	3 093	2 582	2 474	2 331	2 669	2 702	2 840	3 136
	(year)	1976	1964	1976	1976	1976	1976	1976	1976	1973	1959	1973	1973
	High	10 520	10 850	9 923	8 521	7 312	6 550	5 219	5 245	5 128	7 867	9 857	10 880
	(year)	1969	1969	1977	1969	1966	1979	1979	1979	1968	1960	1960	1980
Runoff	Avg	48	49	52	47	43	35	31	29	27	31	35	42
	Low	31	29	27	23	23	19	18	17	19	20	20	23
	High	78	73	74	61	54	47	39	39	37	59	71	81
Rainfall	Avg	108	69	72	48	73	53	62	59	90	52	91	77
(1971-1979)	Low	39	19	24	16	39	10	34	38	21	30	31	25
	High	159	137	125	68	131	91	87	89	195	71	197	138

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	5 332	5 348	100
Lowest yearly mean		3 708	
Highest yearly mean		6 594	
Lowest monthly mean	4 118	2 331	1973
Highest monthly mean	6 860	10 860	Dec 1960
Lowest daily mean	3 440	2 167	24 Aug 1976
Highest daily mean	7 513	12 800	29 Jan 1969
Peak			
10 %ile	6 745	7 828	86
50 %ile	5 154	4 868	106
95 %ile	3 804	3 019	126
Annual total (million cu m)	168.10	168.80	100
Annual runoff (mm)	467	469	100
Annual rainfall (mm)		854	
{ 1941-70 rainfall average (mm)		876}	

Factors affecting flow regime

- Flow influenced by groundwater abstraction and/or recharge
- Abstraction for public water supplies
- Augmentation from surface water and/or groundwater.

Station description

043005 Avon at Amesbury

1981

Measuring authority: WWA
First year: 1965
Grid reference: SU 151413
Level stn. (m OD) 67.06
Catchment area (sq km): 323.7
Max. alt. (m OD) 294

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2 679	2 947	3 316	7 279	5 301	3 839	2 882	2 498	1 516	2 314	2 644	3 041
2	2 650	2 934	4 587	7 017	5 014	4 298	2 841	2 498	1 512	2 355	2 615	2 943
3	2 722	3 215	6 246	6 775	5 008	4 455	2 841	2 225	1 504	2 219	2 582	2 925
4	2 672	3 155	4 648	6 607	4 981	4 108	2 783	2 113	1 488	2 137	2 548	2 856
5	2 613	3 070	4 146	6 487	4 871	3 946	2 750	2 044	1 487	2 452	2 520	2 898
6	2 603	3 017	4 475	6 404	4 931	3 832	2 717	2 099	1 486	2 580	2 473	2 896
7	2 626	3 025	4 475	6 248	4 901	3 752	2 659	2 710	1 483	2 337	2 471	2 916
8	2 587	3 010	4 699	6 151	4 747	3 703	2 535	2 182	1 455	2 247	2 469	3 524
9	2 650	3 067	5 470	6 001	4 603	3 633	2 605	2 072	1 461	2 378	2 477	4 132
10	2 725	3 159	6 951	6 004	4 591	3 604	2 568	2 044	1 454	2 316	2 465	3 418
11	2 700	3 080	7 490	6 045	4 493	3 854	2 548	1 977	1 439	2 325	2 443	3 424
12	2 747	3 073	6 791	5 864	4 336	4 067	2 530	1 844	1 465	2 370	2 454	3 173
13	2 749	3 035	8 018	5 779	4 205	3 745	2 518	1 883	1 560	2 319	2 561	3 396
14	2 943	2 999	8 759	5 677	4 070	3 584	2 426	1 778	1 677	2 279	2 435	5 072
15	3 097	2 983	7 283	5 573	3 924	3 513	2 329	1 701	1 648	2 280	2 410	7 120
16	3 020	2 962	7 097	5 363	3 980	3 429	2 281	1 727	1 668	2 396	2 548	5 474
17	3 030	2 965	6 867	5 397	4 314	3 347	2 290	1 713	1 627	2 386	2 680	4 751
18	2 999	2 970	6 733	5 326	4 536	3 318	2 288	1 727	1 664	2 356	2 643	4 458
19	3 075	2 964	6 697	5 281	4 448	3 352	2 221	1 701	2 026	2 352	2 940	4 237
20	3 092	2 961	6 688	5 165	4 666	3 368	2 059	1 747	2 352	2 534	3 067	4 592
21	3 205	2 997	7 153	5 074	4 643	3 228	1 967	1 824	2 222	2 926	3 200	5 659
22	3 298	3 108	9 674	5 102	4 348	3 058	2 348	1 746	1 888	2 652	2 959	5 775
23	3 179	3 207	8 284	5 049	4 159	3 045	2 392	1 723	1 732	2 485	2 881	5 096
24	3 134	3 013	7 722	5 105	4 063	3 100	2 073	1 682	1 738	2 453	2 761	4 851
25	3 074	2 905	7 449	5 249	4 148	3 039	2 155	1 626	1 851	2 540	2 736	4 701
26	3 036	2 952	7 559	6 071	4 443	3 109	2 137	1 617	2 176	2 514	2 718	4 784
27	3 003	2 994	7 181	7 712	4 264	2 962	2 008	1 552	2 460	2 528	2 927	5 451
28	2 952	3 175	6 958	6 646	4 128	2 923	1 867	1 519	2 148	2 640	3 163	6 097
29	3 016	6 872	5 781	4 028	2 947	1 804	1 536	1 941	2 643	3 151	8 332	
30	2 957	7 125	5 560	3 881	2 944	1 748	1 521	2 112	2 596	2 946	10 480	
31	2 951	7 136		3 785		1 747	1 517		2 665		8 691	
Average	2 896	3 034	6 597	5 910	4 445	3 503	2 352	1 860	1 741	2 436	2 695	4 747
Lowest	2 587	2 905	3 316	5 049	3 785	2 923	1 747	1 517	1 439	2 137	2 410	2 856
Highest	3 298	3 215	9 624	7 279	5 301	4 455	2 882	2 498	2 460	2 926	3 200	10 480
Peak flow	3 354	3 437	10 390	7 584	5 420	4 783	3 048	2 737	2 689	3 323	3 623	11 000
Day of peak	22	3	22	27	1	2	1	1	27	21	29	30
Monthly total (million cu m)	7 76	7 34	17 67	15 32	11 91	9 08	6 30	4 98	4 51	6 53	6 99	12 71
Runoff (mm)	24	23	55	47	37	28	19	15	14	20	22	39
Rainfall (mm)	36	34	150	37	82	41	50	22	130	84	47	106

Statistics of monthly data for previous record (Feb 1965 to Dec 1980)

Mean	Avg	5 058	6 014	5 528	4 428	3 388	2 601	2 006	1 721	1 623	1 920	2 652	3 822
Flows	Low	1 199	1 187	1 158	1 039	0 834	0 626	0 475	0 372	0 644	1 149	1 090	1 385
	(year)	1976	1976	1976	1976	1976	1976	1976	1976	1976	1970	1973	1975
	High	7 765	9 686	8 352	7 587	5 146	4 260	3 071	2 362	2 528	3 521	6 440	6 419
	(year)	1977	1977	1972	1979	1979	1979	1971	1979	1974	1966	1974	1974
Runoff	Avg	42	45	46	35	28	21	17	14	13	16	21	32
	Low	10	9	10	8	7	5	4	3	5	10	9	11
	High	64	72	69	61	43	34	25	20	20	29	52	53
Rainfall	Avg	80	60	63	46	59	59	52	67	68	63	76	85
	Low	18	6	14	8	24	3	15	25	11	4	31	26
	High	134	134	133	100	121	143	113	152	179	161	185	160

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre 1981
Mean flow (m ³ s ⁻¹)	3 523	3 383	104
Lowest yearly mean		1 431	1976
Highest yearly mean		4 476	1977
Lowest monthly mean	1 741	0 372	Aug 1976
Highest monthly mean	6 597	9 686	Feb 1977
Lowest daily mean	1 439	0 175	22 Aug 1976
Highest daily mean	10 480	15 540	25 Feb 1977
Peak	11 000	17 280	28 Dec 1979
10 %ile	6 145	6 483	95
50 %ile	2 981	2 773	108
95 %ile	1 613	1 120	144
Annual total (million cu m)	111.10	106.80	104
Annual runoff (mm)	343	330	104
Annual rainfall (mm)	819	778	105
[1941-70 rainfall average (mm)]		764]	

Factors affecting flow regime

● Natural to within 10% at 95 percentile flow

Station description

Crump weir 9.14 m broad with a broad crested weir on both sides

047001 Tamar at Gunnislake**1981**Measuring authority: SWWA
First year: 1956Grid reference: SX 426725
Level stn. (m OD) 8.21Catchment area (sq km) 916.9
Max alt (m OD) 586**Daily mean gauged discharges (cubic metres per second)**

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	23 170	13 590	37 160	20 040	8 497	18 080	5 449	30 050	2 221	137 900	41 210	73 710
2	21 780	13 320	44 890	17 760	12 570	26 700	5 445	9 568	2 216	167 400	34 330	19 980
3	24 110	47 470	32 440	16 150	18 290	26 450	6 112	7 196	2 134	187 900	29 770	18 640
4	19 900	26 050	26 540	14 750	27 630	19 580	5 480	6 391	2 088	86 890	28 070	17 990
5	17 610	20 860	24 500	13 580	17 780	16 770	5 210	5 740	2 063	84 850	27 910	16 950
6	16 670	18 490	23 390	12 710	19 460	15 450	5 510	5 451	2 045	52 600	20 170	18 930
7	15 330	17 960	55 540	12 060	15 440	14 790	4 797	5 163	2 062	38 550	18 310	28 290
8	14 530	18 270	64 420	11 380	13 160	14 130	4 473	4 770	2 100	45 200	16 540	61 680
9	16 570	41 930	252 000	11 070	11 750	12 810	4 293	4 634	2 116	50 200	14 980	45 000
10	18 160	24 770	202 500	10 550	16 960	15 830	4 111	4 198	2 455	41 070	13 980	52 340
11	14 160	21 620	152 400	10 120	17 990	31 870	3 975	3 922	4 107	36 980	13 370	76 010
12	15 190	27 490	96 090	9 305	11 540	17 640	3 985	3 814	3 557	39 800	12 760	39 420
13	19 370	19 170	97 990	8 976	11 800	15 560	4 399	3 744	3 980	29 880	11 610	121 500
14	57 120	17 310	60 200	8 635	17 660	14 270	4 074	3 595	4 153	27 560	10 900	133 400
15	40 090	16 370	44 680	8 119	47 980	13 040	3 881	3 483	6 547	36 720	10 550	62 280
16	42 500	15 270	36 730	7 609	42 360	11 820	3 873	3 317	4 567	24 970	10 800	47 560
17	41 190	14 260	30 790	7 213	62 050	10 960	3 902	2 965	7 590	38 760	12 800	39 490
18	57 150	13 390	26 800	6 845	55 500	10 150	3 887	2 871	36 580	30 440	49 000	31 290
19	47 960	12 540	23 950	6 574	38 760	9 643	5 278	2 883	75 930	39 330	47 690	51 880
20	53 800	11 810	21 730	6 337	34 280	9 154	5 283	4 663	49 270	99 450	71 360	256 600
21	49 230	16 290	109 400	6 024	26 600	8 474	4 577	3 941	24 500	79 680	33 160	87 230
22	36 030	20 940	143 900	5 961	23 220	7 837	18 110	3 311	17 950	54 850	26 940	54 470
23	31 630	54 620	72 140	5 899	25 900	7 555	11 570	3 093	14 260	41 170	25 880	41 430
24	28 900	24 890	59 650	6 069	37 980	7 238	7 503	2 922	27 080	111 400	22 040	32 720
25	26 100	21 410	64 700	6 675	42 240	6 873	5 652	2 768	18 660	107 300	19 670	27 650
26	22 510	19 530	70 250	11 260	49 700	6 539	5 095	2 693	33 120	61 000	20 950	35 840
27	20 270	25 380	45 560	24 520	34 190	6 235	4 697	2 538	29 630	53 130	34 150	55 400
28	18 520	23 050	37 030	12 570	27 590	5 908	4 298	2 438	19 070	50 590	26 300	66 690
29	17 700	30 340	13 200	23 770	23 770	5 647	4 072	2 391	18 650	58 560	22 210	97 440
30	15 700	25 720	9 431	20 880	5 485	3 850	2 305	30 950	58 060	27 270	112 400	67 630
31	14 480	22 560		18 460			28 090	2 219		50 350		
Average	27 480	21 890	65 520	10 710	26 680	13 060	6 159	4 808	15 070	65 080	24 990	59 250
Lowest	14 160	11 810	21 730	5 899	8 497	5 485	3 850	2 219	2 045	24 970	10 550	16 950
Highest	57 150	54 620	252 000	24 520	62 050	31 870	28 090	30 050	75 930	187 900	71 360	256 600
Peak flow	111 600	92 150	411 700	28 070	87 750	54 000	36 990	87 750	173 900	240 600	135 500	383 600
Day of peak	15	3	10	27	16	4	22	1	20	2	20	20
Monthly total (million cu m)	73 60	52 96	175 50	27 77	71 45	33 85	16 50	12 88	39 05	174 30	64 77	158 70
Runoff (mm)	80	58	191	30	78	37	18	14	43	190	71	173
Rainfall (mm)	80	87	219	43	149	52	100	18	191	238	83	199

Statistics of monthly data for previous record (Jul 1956 to Dec 1980— incomplete or missing months total 3.4 years)

Mean flows	Avg	47 150	40 420	25 050	16 190	9 570	6 439	5 545	8 687	13 770	19 100	34 970	44 500
Low	8 476	9 161	11 250	6 420	3 488	1 995	1 181	0 757	1 118	1 540	4 213	18 350	18 350
(year)	1964	1965	1961	1974	1976	1976	1976	1976	1976	1978	1978	1978	1963
High	89 410	84 270	48 350	31 500	22 860	20 630	21 900	42 100	59 840	63 350	78 760	91 690	91 690
(year)	1974	1974	1979	1960	1967	1972	1965	1958	1974	1960	1959	1959	1959
Runoff	Avg	138	107	73	46	28	18	16	25	39	56	99	130
	Low	25	24	33	18	10	6	3	2	3	5	12	54
	High	261	222	141	89	67	58	64	123	169	185	223	268
Rainfall	Avg	146	103	91	68	71	71	87	96	104	113	137	141
	Low	23	3	14	8	25	11	24	33	10	12	58	41
	High	301	206	170	151	139	167	160	179	251	258	274	266

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre 1981
Mean flow (m ³ s ⁻¹)	28 580	22 540	127
Lowest yearly mean		12 520	1964
Highest yearly mean		34 890	1974
Lowest monthly mean	4 808	0 757	Aug 1976
Highest monthly mean	65 520	91 690	Dec 1959
Lowest daily mean	2 045	0 580	23 Aug 1976
Highest daily mean	256 600	482 300	27 Dec 1979
Peak	411 700	714 600	28 Dec 1979
10 %ile	59 370	55 950	106
50 %ile	18 580	11 840	157
95 %ile	2 887	1 748	165
Annual total (million cu m)	901.30	711.40	127
Annual runoff (mm)	983	776	127
Annual rainfall (mm)	1459	1228	119
{ 1941-70 rainfall average (mm)		1230]	

Factors affecting flow regime

- Reservoir(s) in catchment
- Flow influenced by groundwater abstraction and/or recharge
- Abstraction for public water supplies
- Flow reduced by industrial and/or agricultural abstractions
- Augmentation from surface water and/or groundwater
- Augmentation from effluent returns

Station description

Velocity-area station. Because of the presence of large boulders, low flows are measured at a ford about 1.6 km upstream.

050001 Taw at UMBERLEIGH**1981**Measuring authority SWWA
First year 1958Grid reference SS 608237
Level stn (m OD) 14 14Catchment area (sq km) 826 2
Max alt (m OD) 604**Daily mean gauged discharges (cubic metres per second)**

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	19 190	10 920	37 280	13 900	8 922	16 710	3 008	3 249	1 272	39 130	44 220	33 430
2	19 140	11 980	40 710	12 020	13 230	29 010	3 125	2 242	1 305	63 770	35 000	27 270
3	23 450	43 450	28 700	10 850	18 080	16 470	3 740	1 919	1 235	105 200	29 010	23 180
4	17 580	28 340	23 290	9 823	18 300	15 690	3 109	1 857	1 157	78 200	24 830	20 440
5	15 950	22 470	21 020	8 913	17 550	13 840	3 043	2 091	1 109	58 640	20 230	17 890
6	15 520	19 190	21 440	8 200	19 040	12 160	3 231	8 561	1 078	44 100	17 230	18 600
7	13 830	17 750	33 840	7 679	17 730	11 390	2 662	4 332	1 079	33 600	15 170	31 070
8	12 870	16 930	37 610	7 318	15 710	10 670	2 441	3 192	1 106	30 380	13 280	69 430
9	16 190	20 830	223 400	7 043	13 770	9 451	2 283	2 787	1 096	33 360	11 630	41 100
10	14 200	16 420	173 500	6 694	29 540	10 960	2 174	2 405	1 228	31 090	10 580	40 460
11	11 690	15 290	136 900	7 144	17 620	17 580	2 037	2 200	1 830	30 730	10 360	69 490
12	14 250	15 010	107 300	5 962	14 770	10 980	2 084	2 037	2 238	29 440	9 672	41 850
13	15 650	13 250	95 870	5 427	12 960	9 766	2 115	1 920	2 768	23 360	8 364	104 300
14	80 700	11 940	64 940	5 040	12 020	9 056	2 013	1 846	2 418	21 270	7 645	136 100
15	59 900	11 250	47 040	4 826	18 840	8 388	1 993	1 810	4 032	34 210	7 235	74 980
16	59 230	10 400	36 300	4 583	18 690	7 624	1 997	1 686	2 511	23 060	7 329	48 700
17	59 010	9 654	28 140	4 267	33 340	7 013	1 939	1 564	4 231	28 540	8 770	35 880
18	61 550	8 956	23 000	4 017	28 870	6 398	1 814	1 518	21 100	25 060	31 920	26 640
19	51 280	8 265	19 490	3 848	21 890	5 996	1 918	1 597	47 080	32 680	45 490	22 260
20	51 260	7 799	16 960	3 671	24 980	5 551	1 882	2 931	34 500	76 020	55 820	83 240
21	57 170	13 540	54 130	3 520	18 270	4 922	2 531	2 170	23 510	57 400	41 600	40 630
22	44 360	14 310	57 040	3 454	16 660	4 532	8 875	1 847	17 760	42 990	32 140	29 310
23	36 600	31 930	44 340	3 320	18 970	4 320	5 221	1 727	14 530	32 740	27 840	23 180
24	32 140	16 980	39 990	3 738	23 800	4 180	3 528	1 605	20 270	79 240	22 910	18 880
25	25 910	14 590	38 440	4 100	31 200	3 912	2 786	1 512	16 820	100 000	19 190	16 110
26	21 570	13 620	49 640	10 110	25 570	3 759	2 607	1 422	15 610	63 880	19 850	18 300
27	18 590	24 220	32 660	24 990	24 870	3 541	2 319	1 355	15 740	49 610	35 840	42 330
28	16 460	22 710	26 900	13 750	20 850	3 346	2 151	1 310	12 460	40 030	38 720	65 270
29	14 910		22 310	14 700	18 340	3 165	2 000	1 279	12 950	58 140	30 400	74 130
30	13 190		18 380	10 390	16 400	3 035	1 892	1 246	18 350	60 950	44 110	88 900
31	11 850		15 890		15 370		2 710	1 224		52 860		53 640
Average	29 830	16 860	52 140	7 776	19 550	9 114	2 749	2 208	9 896	47 730	24 210	46 350
Lowest	11 690	7 799	15 890	3 320	8 922	3 035	1 814	1 224	1 078	21 270	7 235	16 110
Highest	80 200	43 450	223 400	24 990	33 340	29 010	8 875	8 561	42 080	105 200	55 820	136 100
Peak flow	149 700	80 990	339 900	32 560	50 860	54 120	14 080	11 550	95 070	123 900	90 340	256 000
Day of peak	15	3	10	27	10	2	22	6	20	24	20	14
Monthly total (million cu m)	79 89	40 78	139 70	20 16	52 37	23 62	7 36	5 91	25 65	127 80	62 76	124 10
Runoff (mm)	97	49	169	24	63	29	9	7	31	155	76	150
Rainfall (mm)	90	76	183	47	126	42	78	35	153	200	85	173

Statistics of monthly data for previous record (Oct 1958 to Dec 1980)

Mean flows	Avg	34 700	30 430	19 180	14 000	8 943	5 324	4 874	5 804	8 152	17 690	28 140	35 640
	Low	6 657	3 244	7 918	3 889	2 073	1 434	0 796	0 423	0 861	1 043	3 653	13 210
	(year)	1963	1959	1962	1974	1976	1976	1976	1976	1959	1978	1978	1963
	High	50 890	54 760	44 410	32 800	22 140	16 630	23 390	4 440	47 670	77 360	58 500	73 670
	(year)	1965	1970	1979	1966	1969	1972	1968	1965	1974	1960	1963	1965
Runoff	Avg	112	90	62	44	29	17	16	19	26	57	88	116
	Low	22	10	26	12	7	5	3	1	3	3	11	43
	High	165	160	144	103	72	52	76	47	150	251	184	239
Rainfall	Avg	129	91	85	71	70	67	74	90	90	108	129	135
	Low	28	5	18	8	28	10	23	33	14	14	56	41
	High	216	173	164	145	144	164	152	140	247	278	239	271

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ /s)	22 520	17 690	127
Lowest yearly mean		11 310	1964
Highest yearly mean		27 590	1960
Lowest monthly mean	2 208	0 423	Aug 1976
Highest monthly mean	52 140	77 360	Oct 1960
Lowest daily mean	1 078	0 200	28 Aug 1976
Highest daily mean	223 400	363 800	4 Dec 1960
Peak	339 900	644 900	4 Dec 1960
10 %ile	53 090	45 690	116
50 %ile	15 790	9 240	171
95 %ile	1 587	1 240	126
Annual total (million cu m)	710 20	558 30	127
Annual runoff (mm)	860	876	127
Annual rainfall (mm)	1288	1139	113
[1941-70 rainfall average (mm)]		1183	

Factors affecting flow regime

- Reservoir(s) in catchment
- Abstraction for public water supplies
- Augmentation from effluent returns

Station description

Velocity-area station

052005 Tone at Bishops Hull**1981**Measuring authority WWA
First year: 1961Grid reference: ST 206250
Level sin. (m OD) 16.20Catchment area (sq km): 202.0
Max alt. (m OD) 409

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3 363	2 316	4 349	3 907	1 976	3 373	1 049	1 133	0 793	4 866	4 628	3 426
2	3 339	2 383	7 899	3 275	2 830	5 966	1 078	0 860	0 776	3 610	4 139	3 205
3	3 467	4 095	8 076	3 120	2 733	3 393	1 086	0 845	0 767	3 369	3 779	3 027
4	2 903	3 743	5 257	2 859	2 483	2 801	1 062	0 829	0 766	3 160	3 398	3 069
5	2 656	2 811	4 390	2 739	2 177	2 617	1 083	0 930	0 766	2 723	3 059	2 907
6	2 588	2 601	4 411	2 563	2 250	2 474	1 079	2 657	0 758	2 552	2 840	2 836
7	2 378	2 534	7 370	2 479	2 153	2 283	0 920	1 231	0 794	2 252	2 655	3 974
8	2 281	2 500	6 613	2 419	2 028	2 143	0 938	1 080	0 781	2 259	2 465	9 673
9	2 423	2 714	34 170	2 305	2 181	2 035	0 971	0 982	0 758	2 281	2 268	5 364
10	2 286	2 667	26 850	2 335	4 063	2 110	0 904	0 890	1 155	2 233	2 182	5 149
11	2 183	2 577	24 100	2 268	2 554	2 698	0 906	0 862	1 131	2 211	2 173	8 078
12	2 328	2 595	16 480	2 096	2 202	2 000	0 904	0 853	1 000	2 257	2 091	5 273
13	2 147	2 422	13 230	2 009	2 105	1 921	0 924	0 845	0 955	2 096	1 958	33 380
14	6 090	2 290	9 779	1 988	2 016	1 813	0 876	0 858	0 946	2 116	1 915	30 570
15	4 518	2 250	8 024	1 941	2 909	1 700	0 866	0 836	0 946	3 824	1 902	11 210
16	5 927	2 203	6 781	1 874	3 016	1 650	0 866	0 801	0 852	2 596	1 969	7 392
17	6 688	2 179	5 858	1 798	3 765	1 619	0 784	0 776	1 388	4 543	2 226	5 956
18	6 830	2 143	5 108	1 753	4 738	1 591	0 794	0 734	2 668	3 751	3 386	6 287
19	5 396	2 091	4 561	1 733	3 615	1 611	0 840	0 719	5 791	3 175	3 208	39 620
20	5 206	2 055	4 114	1 694	3 986	1 563	0 820	0 794	3 288	4 473	4 020	9 646
21	4 964	2 037	11 030	1 678	3 527	1 483	0 840	0 735	1 719	3 486	3 183	7 236
22	4 401	2 969	9 595	1 699	3 376	1 402	1 575	0 755	1 375	3 070	3 033	6 400
23	4 085	5 055	7 955	1 664	3 738	1 364	1 139	0 744	1 222	2 817	3 324	5 903
24	3 954	3 918	7 208	1 892	3 913	1 308	1 015	0 720	2 228	4 798	3 172	5 316
25	3 635	2 995	7 269	1 799	5 576	1 219	0 910	0 789	1 921	10 000	2 991	5 468
26	3 347	2 758	9 629	2 996	3 761	1 215	0 872	0 789	2 579	5 465	2 958	8 126
27	3 065	2 855	6 655	3 925	3 434	1 194	0 828	0 786	1 750	4 899	4 075	9 380
28	2 908	6 351	5 946	2 589	3 161	1 180	0 834	0 781	1 479	4 752	4 329	19 100
29	2 733	5 317	2 438	2 943	1 152	0 826	0 791	0 791	1 459	5 638	3 602	52 340
30	2 608	4 713	2 088	2 767	1 099	0 806	0 774	0 774	1 945	6 235	3 711	11 700
31	2 475	4 350		2 829		1 110	0 791			5 388		10 570
Average	3 649	2 843	9 259	2 331	3 058	1 999	0 952	0 902	1 492	3 768	3 021	11 020
Lowest	2 147	2 037	4 114	1 664	1 976	1 099	0 784	0 719	0 758	2 096	1 902	2 836
Highest	6 830	6 351	34 170	3 925	5 576	5 966	1 575	2 657	5 791	10 000	4 628	52 340
Peak flow	12 040	9 011	53 310	4 405	9 750	10 520	2 200	5 021	15 030	16 620	5 224	91 770
Day of peak	14	23	9	27	25	2	22	6	19	25	18	29
Monthly total (million cu m)	9 77	6 88	24 80	6 04	8 19	5 18	2 55	2 42	3 87	10 09	7 83	29 51
Runoff (mm)	48	34	123	30	41	26	13	12	19	50	39	146
Rainfall (mm)	62	65	170	43	117	41	56	38	147	139	57	191

Statistics of monthly data for previous record (Feb 1961 to Dec 1980)

Mean	Avg	5 744	6 508	4 269	2 865	1 988	1 398	1 265	0 980	1 263	1 984	3 179	4 573
Flows	Low	1 246	1 746	1 552	1 177	0 735	0 455	0 326	0 266	0 501	0 580	0 652	1 821
	(year)	1976	1965	1962	1976	1976	1976	1976	1976	1964	1978	1978	1975
	High	10 580	14 000	7 907	6 616	3 085	2 770	5 628	1 686	4 892	9 872	6 761	11 280
	(year)	1971	1978	1963	1966	1967	1972	1968	1965	1974	1976	1963	1965
Runoff	Avg	76	78	57	37	26	18	17	13	16	26	41	61
	Low	17	21	21	15	10	6	4	4	6	8	8	24
	High	140	168	105	85	41	36	75	22	63	131	87	150
Rainfall	Avg	111	87	80	61	66	60	60	73	79	83	97	105
	Low	25	6	5	8	25	8	16	22	8	8	41	40
	High	202	170	146	150	126	147	144	122	202	249	185	205

Summary statistics

Factors affecting flow regime

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	3 714	2 984	124
Lowest yearly mean		1 600	1964
Highest yearly mean		4 084	1974
Lowest monthly mean	0 902	Aug 0 266	Aug 1976
Highest monthly mean	11 020	Dec 14 000	Feb 1978
Lowest daily mean	0 719	19 Aug 0 179	22 Aug 1976
Highest daily mean	52 340	29 Dec 84 200	23 Feb 1978
Peak	91 770	29 Dec 112 700	11 Jul 1968
10 %ile	6 630	6 504	102
50 %ile	2 548	1 734	147
95 %ile	0 783	0 617	127
Annual total (million cu m)	117 10	94 17	124
Annual runoff (mm)	580	466	124
Annual rainfall (mm)	1126	962	117
1941-70 rainfall average (mm)		1027	

Station description

Velocity area station, improved by Crump weir of breadth 12.2 m in 1968

053006 Frome(Bristol) at Frenchay

1981

Measuring authority WWA
First year 1961
Grid reference ST 637772
Level stn (m OD) 19.96
Catchment area (sq km) 148.9
Max alt (m OD) 193

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.998	0.653	1.919	1.620	1.293	1.958	0.363	0.353	0.180	1.368	2.486	1.412
2	0.949	2.452	2.062	1.300	1.035	4.249	0.378	0.227	0.173	1.199	2.749	1.229
3	0.903	5.658	1.737	1.151	1.441	1.763	0.506	0.207	0.182	5.923	2.164	1.133
4	0.766	2.380	1.396	1.043	1.205	1.275	0.371	0.199	0.160	5.178	1.693	1.158
5	0.699	1.621	1.588	0.993	1.155	1.046	0.967	0.215	0.166	3.775	1.425	1.092
6	0.715	1.298	2.570	0.957	1.084	1.052	0.612	1.564	0.169	2.722	1.241	1.023
7	0.654	1.144	8.836	0.919	0.930	0.949	0.419	0.501	0.181	2.490	1.082	1.609
8	0.635	1.080	4.939	0.854	0.779	0.843	0.378	0.327	0.178	2.222	0.970	8.338
9	1.048	1.390	16.160	0.819	0.724	0.761	0.618	0.277	0.178	3.039	0.888	3.195
10	0.949	1.649	20.430	0.899	0.753	0.968	0.379	0.256	0.537	2.897	0.838	2.136
11	0.770	1.394	26.530	0.828	0.636	0.912	0.347	0.244	0.749	2.879	0.832	1.977
12	0.859	1.137	13.240	0.753	0.627	0.678	0.341	0.234	0.487	2.613	0.778	1.565
13	0.814	0.991	12.470	0.726	0.618	0.608	0.326	0.224	0.454	1.702	0.710	4.894
14	1.603	0.884	8.008	0.773	0.549	0.582	0.299	0.220	1.030	1.972	0.649	12.680
15	1.443	0.802	4.662	0.710	0.658	0.543	0.282	0.213	0.664	5.257	0.645	6.825
16	1.808	0.752	3.361	0.700	0.809	0.503	0.284	0.203	0.339	2.623	0.722	3.377
17	1.556	0.757	2.592	0.631	1.599	0.481	0.310	0.195	1.720	2.314	0.835	2.225
18	1.498	0.721	2.139	0.627	1.669	0.465	0.268	0.199	2.017	2.191	2.765	1.621
19	1.471	0.679	1.830	0.606	1.302	0.475	0.248	0.228	3.533	3.445	6.381	1.326
20	1.320	0.657	1.579	0.579	3.927	0.460	0.238	0.210	2.145	12.810	10.540	3.295
21	1.850	0.911	7.137	0.582	1.682	0.441	0.242	0.195	0.947	5.184	4.801	7.674
22	1.470	2.114	8.628	0.580	1.505	0.416	0.608	0.189	0.817	2.796	2.986	4.393
23	1.261	1.872	5.120	0.561	2.707	0.404	0.507	0.182	0.516	1.959	2.327	2.972
24	1.108	1.338	4.147	0.637	5.706	0.402	0.293	0.182	0.815	4.338	1.799	2.255
25	0.969	1.070	3.614	0.830	9.754	0.398	0.253	0.194	0.972	3.934	1.465	1.729
26	0.947	0.974	2.685	3.016	6.328	0.398	0.243	0.173	7.375	2.458	1.668	4.310
27	0.870	1.076	2.111	8.765	3.906	0.391	0.237	0.192	3.167	1.990	3.446	5.534
28	0.818	1.578	1.724	4.188	2.543	0.376	0.227	0.194	1.534	1.780	2.624	5.123
29	0.776		1.807	2.802	1.888	0.377	0.213	0.180	1.309	2.841	1.944	15.300
30	0.719		1.790	1.762	1.498	0.376	0.212	0.173	1.765	3.531	1.777	26.630
31	0.679		1.802		1.289		0.390	0.176		2.554		11.670
Average	1.062	1.394	5.762	1.374	1.987	0.818	0.366	0.269	1.147	3.293	2.181	4.829
Lowest	0.635	0.651	1.396	0.561	0.549	0.376	0.212	0.173	0.160	1.199	0.645	1.023
Highest	1.850	5.658	26.530	8.765	9.754	4.249	0.967	1.564	7.375	12.810	10.540	26.630
Peak flow	2.254	11.060	32.700	11.340	16.170	7.078	2.374	3.278	9.940	17.390	15.160	37.190
Day of peak	16	2	11	27	24	1	5	6	26	20	19	30
Monthly total (million cu m)	2.84	3.37	15.43	3.56	5.32	2.12	0.98	0.72	2.96	8.82	5.65	12.93
Runoff (mm)	19	23	104	24	36	14	7	5	20	59	38	87
Rainfall (mm)	30	43	146	47	100	33	52	26	142	118	57	114

Statistics of monthly data for previous record (Oct 1961 to Dec 1980)

Mean	Avg	3.355	3.091	2.191	1.334	1.095	0.805	0.701	0.514	0.792	1.100	1.979	3.074
Flows	Low	0.670	0.613	0.637	0.476	0.290	0.220	0.122	0.139	0.208	0.162	0.211	0.820
	(year)	1976	1965	1973	1976	1976	1976	1976	1976	1978	1978	1978	1973
	High	6.152	6.040	4.854	3.434	3.179	2.973	3.516	1.197	5.113	4.691	5.434	9.807
	(year)	1962	1977	1979	1966	1979	1971	1968	1971	1974	1967	1963	1965
Runoff	Avg	60	51	39	23	20	14	13	9	14	20	34	54
	Low	12	10	11	8	5	4	2	3	4	3	4	15
	High	111	98	87	60	57	52	63	21	89	84	95	176
Rainfall	Avg	74	56	60	49	64	64	56	71	73	62	75	85
	Low	18	3	21	9	25	6	12	27	21	5	35	25
	High	137	127	126	97	147	139	129	127	182	183	165	208

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	2.052	1.658	124
Lowest yearly mean		0.804	1973
Highest yearly mean		2.258	1974
Lowest monthly mean	0.269	0.222	Jul 1976
Highest monthly mean	5.762	9.807	Dec 1965
Lowest daily mean	0.160	0.075	10 Aug 1976
Highest daily mean	26.630	53.530	18 Dec 1965
Peak	37.190	76.500	1 Feb 1979
10 %ile	4.489	4.065	110
50 %ile	1.050	0.754	139
95 %ile	0.194	0.201	96
Annual total (million cu m)	64.71	52.32	124
Annual runoff (mm)	435	351	124
Annual rainfall (mm)	902	789	114
[1941-70 rainfall average (mm)]		791	

Factors affecting flow regime

- Flow influenced by groundwater abstraction and/or recharge
- Abstraction for public water supplies
- Flow reduced by industrial and/or agricultural abstractions

Station description

Trapezoidal critical depth flume Range 0.028/56.6 cu m/s

054001 Severn at Bewdley**1981**Measuring authority: STWA
First year: 1921Grid reference: SO 782762
Level stn. (m OD) 17 00Catchment area (sq km): 4325 0
Max alt. (m OD) 827**Daily mean gauged discharges (cubic metres per second)**

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	81 430	34 910	106 600	76 690	58 710	39 400	15 870	10 900	9 574	103 200	127 400	103 000
2	74 240	33 890	128 500	68 620	47 290	82 480	15 420	11 030	10 290	154 600	98 120	86 980
3	72 970	73 470	106 600	58 500	40 580	106 200	15 600	10 080	9 653	135 500	109 100	71 250
4	90 510	198 500	83 480	52 270	47 560	70 580	16 230	9 802	10 010	94 150	94 810	62 070
5	72 300	144 200	73 630	47 620	65 140	51 030	15 870	9 350	10 040	67 810	81 830	63 880
6	65 110	100 500	76 910	43 900	55 030	43 780	16 220	16 420	9 567	53 410	66 780	66 690
7	80 840	80 090	87 710	41 930	67 150	39 530	15 300	21 910	9 678	48 540	58 860	69 930
8	74 220	71 270	137 000	40 890	48 740	37 970	14 400	24 840	10 470	61 030	53 160	80 530
9	65 060	128 900	163 000	44 830	43 200	38 110	13 970	19 870	11 380	153 100	49 600	87 370
10	78 690	215 600	201 800	44 400	38 950	37 060	14 480	16 060	12 160	199 400	44 490	66 690
11	71 070	155 400	288 400	39 440	38 600	36 130	13 950	14 790	14 170	215 500	38 180	58 800
12	62 170	114 300	315 200	36 080	36 400	42 210	13 020	13 620	13 360	194 300	37 910	52 570
13	70 310	98 280	335 300	34 730	32 100	42 400	12 800	12 780	13 390	147 500	44 170	45 600
14	77 950	84 120	275 400	33 640	30 800	35 790	12 330	12 460	12 040	112 500	38 590	52 110
15	188 900	69 950	211 100	31 060	29 790	32 950	11 860	12 610	14 030	89 070	34 890	140 200
16	198 100	82 230	189 100	28 440	33 200	43 930	11 940	12 040	13 120	74 350	33 640	188 800
17	167 400	57 080	130 200	27 180	44 020	33 580	12 250	11 720	15 850	64 100	34 270	116 700
18	155 100	50 810	107 800	25 990	45 530	28 340	13 390	10 930	16 420	58 890	43 350	81 490
19	144 700	45 170	96 700	24 920	51 290	26 180	11 960	11 060	30 080	50 310	151 600	63 300
20	140 600	41 430	88 980	23 950	61 770	24 500	11 860	11 880	53 090	102 800	115 700	62 770
21	125 000	39 070	132 100	23 280	54 700	23 660	11 390	11 650	87 170	176 500	102 800	87 050
22	111 500	39 540	268 200	22 600	46 910	20 690	11 750	11 630	44 650	135 300	83 610	88 020
23	93 380	38 850	320 600	22 120	41 640	19 900	13 360	12 510	32 300	103 500	74 700	70 890
24	80 060	39 810	348 400	23 990	40 520	19 900	16 900	11 910	26 720	87 760	78 300	58 670
25	71 690	39 020	311 300	28 710	52 700	18 800	18 750	11 250	27 260	132 300	71 220	51 080
26	64 460	36 170	243 800	54 930	59 950	17 690	16 620	11 190	36 050	138 500	58 650	44 120
27	57 440	49 340	207 200	79 420	50 860	18 010	14 210	10 900	72 280	105 600	71 610	46 320
28	52 140	89 550	159 900	77 590	50 660	17 840	12 920	9 904	73 220	93 930	156 100	58 700
29	47 300	120 600	75 110	57 180	57 180	16 550	12 740	9 554	68 920	88 600	143 400	138 400
30	41 530	90 480	76 340	45 330	45 330	15 890	12 020	10 210	78 480	98 400	115 800	286 400
31	38 240	74 490		40 700	40 700		11 540	9 914		125 200		277 000
Average	90 790	79 620	176 100	43 640	46 840	36 040	13 900	12 730	28 180	111 800	77 090	91 040
Lowest	38 240	33 890	73 630	22 120	29 790	15 890	11 390	9 350	9 567	48 540	33 640	44 120
Highest	198 100	215 600	348 400	79 420	67 150	106 200	18 750	24 840	87 170	215 500	156 100	286 400
Peak flow	222 800	225 700	355 900	86 800	77 200	115 500	20 300	26 700	104 500	218 600	177 400	310 700
Day of peak	16	10	24	27	7	3	25	8	21	11	28	30
Monthly total (million cu m)	243 20	192 60	471 80	113 10	125 50	93 41	37 23	34 11	73 04	299 40	199 80	243 80
Runoff (mm)	56	45	109	26	29	22	9	8	17	69	46	56
Rainfall (mm)	66	75	156	51	87	45	34	46	145	124	65	97

Statistics of monthly data for previous record (Apr 1921 to Dec 1980)

Mean	Avg	113 400	104 600	72 470	51 790	39 370	29 460	23 690	28 680	37 650	53 000	90 490	100 100
flows	Low	22 090	21 200	23 200	15 890	10 220	9 811	9 592	7 460	7 676	10 500	21 740	17 840
	(year)	1963	1934	1943	1938	1938	1976	1976	1976	1949	1947	1942	1933
	High	250 600	232 300	261 900	112 400	131 600	117 400	91 220	92 360	126 700	140 700	238 300	297 400
	(year)	1939	1946	1947	1947	1969	1931	1968	1927	1946	1967	1940	1965
Runoff	Avg	70	59	45	31	24	18	15	18	23	33	54	62
	Low	14	12	14	10	6	6	6	5	5	7	13	11
	High	155	130	162	67	81	70	56	57	76	87	143	184
Rainfall	Avg	92	69	60	60	70	60	74	78	77	83	97	91
	Low	23	8	3	5	18	5	10	13	5	13	13	10
	High	226	170	175	104	186	123	193	160	209	174	244	211

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	67 450	61 850	109
Lowest yearly mean		36 460	1964
Highest yearly mean		94 740	1960
Lowest monthly mean	12 730	7 460	Aug 1976
Highest monthly mean	176 100	297 400	Dec 1965
Lowest daily mean	9 350	5 990	4 Sep 1976
Highest daily mean	348 400	637 100	21 Mar 1947
Peak	355 900	24 Mar	
10 %ile	141 700	148 700	95
50 %ile	50 480	37 360	135
95 %ile	10 960	11 410	96
Annual total (million cu m)	2127 00	1952 00	109
Annual runoff (mm)	492	451	109
Annual rainfall (mm)	991	911	109
[1941-70 rainfall average (mm)]		952]	

Factors affecting flow regime

- Reservoir(s) in catchment.
- Flow influenced by groundwater abstraction and/or recharge
- Abstraction for public water supplies
- Flow reduced by industrial and/or agricultural abstractions
- Augmentation from surface water and/or groundwater
- Augmentation from effluent returns.

Station description

Velocity-area station. The aqueduct site (SO776783) recorder was superseded in January 1970 by the gauging section recorder. Variations used to derive the natural flow include storage changes in Lakes Vyrnwy and Clywedog and abstractions for public water supplies from the river.

055026 Wye at Ddol Farm

1981

Measuring authority WELS Grid reference SN 976676 Catchment area (sq km) 174.0
First year 1969 Level stn (m OD) 192.76 Max alt (m OD) 752

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	8 545	2 390	9 763	3 641	5 829	3 613	0 753	0 636	0 479	33 070	14 770	9 178
2	16 520	25 940	13 910	3 116	3 764	10 310	0 730	0 564	0 460	26 450	19 640	7 611
3	14 640	25 120	10 520	2 759	15 910	5 241	1 106	0 521	0 431	18 890	14 650	6 253
4	10 020	15 910	8 011	2 410	10 850	4 240	0 836	0 484	0 391	12 940	10 940	7 892
5	8 378	14 570	9 377	2 183	12 510	3 548	0 752	0 494	0 347	8 864	8 155	7 744
6	10 370	10 710	9 316	1 968	9 737	3 577	0 805	1 815	0 370	9 107	6 503	8 604
7	7 663	8 570	18 070	1 836	7 223	3 324	0 773	1 161	0 354	13 690	5 205	14 270
8	7 348	13 390	18 250	2 197	5 157	3 172	0 667	0 912	1 002	43 300	4 429	11 010
9	11 810	17 840	42 140	2 084	4 208	3 524	0 674	0 840	0 657	68 440	3 803	8 492
10	7 837	11 200	55 080	1 668	4 491	3 380	0 577	0 692	0 771	39 540	3 308	7 092
11	6 189	9 060	69 640	1 463	3 241	4 081	0 558	0 603	1 077	25 870	5 341	5 931
12	8 307	9 311	27 370	1 432	2 774	3 960	0 573	0 553	1 121	17 240	4 038	4 424
13	11 170	6 748	28 460	1 480	2 403	3 050	0 542	0 520	0 965	11 650	3 249	3 894
14	58 420	5 364	19 690	1 230	2 163	3 432	0 503	0 599	4 089	8 621	2 924	21 270
15	22 760	4 780	13 690	1 131	2 604	3 702	0 495	0 583	5 098	6 465	2 799	16 220
16	23 610	4 422	9 850	1 052	4 417	2 555	0 552	0 522	2 651	4 997	3 002	10 140
17	22 840	3 792	7 345	0 975	6 212	2 149	0 710	0 437	5 281	4 367	2 953	7 479
18	19 050	3 245	6 056	0 911	5 399	1 849	0 725	0 406	9 592	4 378	32 770	5 367
19	17 400	2 889	5 499	0 867	3 733	1 736	0 685	1 515	29 600	48 740	12 510	4 839
20	14 140	2 638	9 020	0 825	4 699	1 560	0 944	3 402	20 640	32 420	11 460	6 433
21	11 910	2 490	54 720	0 783	3 813	1 311	4 591	1 445	12 430	17 010	8 537	5 674
22	9 244	2 377	32 170	0 758	3 646	1 157	8 818	2 212	8 078	10 980	6 930	4 308
23	7 602	2 275	28 130	0 737	3 904	1 080	5 657	1 910	6 371	8 106	9 409	3 467
24	7 650	2 080	7 100	1 077	3 894	1 023	2 728	1 274	7 147	13 740	6 843	3 137
25	5 625	1 872	14 920	1 718	3 764	0 959	1 810	1 039	7 066	13 540	5 847	2 741
26	4 938	1 765	14 510	1 513	2 925	0 928	1 506	0 870	12 690	10 150	14 110	3 293
27	4 293	2 315	10 370	4 629	5 373	0 890	1 169	0 752	23 470	9 659	29 380	3 206
28	3 740	4 372	8 456	9 161	7 148	0 827	1 011	0 659	14 730	10 620	19 650	3 862
29	3 338		6 240	10 790	4 438	0 766	0 879	0 597	19 430	15 690	12 950	5 346
30	2 884		4 922	7 863	3 630	0 752	0 774	0 553	20 520	20 520	13 210	21 170
31	2 581		4 283		3 205		0 699	0 518		15 490		13 370
Average	11 960	7 766	18 930	2 475	5 260	2 723	1 405	0 938	7 240	18 840	9 977	7 862
Lowest	2 581	1 765	4 283	0 737	2 163	0 752	0 495	0 406	0 320	4 367	2 799	2 741
Highest	58 420	25 940	69 640	10 790	15 910	10 310	8 818	3 402	29 600	68 440	32 770	21 270
Peak flow	106 700	92 280	108 700	12 750	24 810	17 170	16 990	9 996	54 230	125 800	75 170	40 730
Day of peak	14	2	11	28	5	2	21	19	19	9	18	14
Monthly total (million cu m)	32.04	18.79	50.71	6.42	14.09	7.06	3.76	2.51	18.77	50.46	25.86	21.06
Runoff (mm)	184	108	291	37	81	41	22	14	108	290	149	121
Rainfall (mm)	159	117	284	72	114	60	61	55	247	269	139	138

Statistics of monthly data for previous record (Oct 1969 to Dec 1980)

Mean	Avg	10 540	10 730	7 472	5 494	3 144	2 324	2 412	3 148	4 168	6 090	11 700	11 320
flows	Low	5 897	5 248	3 802	1 014	0 485	0 497	0 469	0 177	0 948	0 683	6 044	4 974
	(year)	1973	1975	1974	1974	1980	1975	1976	1976	1972	1976	1976	1971
	High	17 720	16 880	18 510	12 460	8 773	5 826	5 543	5 967	12 340	12 030	19 810	17 890
	(year)	1974	1970	1979	1972	1979	1972	1974	1973	1974	1980	1970	1974
Runoff	Avg	162	150	115	82	48	35	37	48	62	94	174	174
	Low	91	73	59	15	7	7	7	3	14	11	90	77
	High	273	235	285	186	135	87	85	92	184	185	295	275
Rainfall	Avg	186	155	131	97	82	86	84	107	122	124	206	185
	Low	98	49	60	13	25	21	35	13	44	39	126	95
	High	322	260	261	206	191	183	150	165	260	225	293	314

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	7 975	6 521	122
Lowest yearly mean		4 304	1976
Highest yearly mean		8 231	1974
Lowest monthly mean	0 938	0 177	Aug 1976
Highest monthly mean	18 930	19 810	Nov 1970
Lowest daily mean	0 320	0 099	28 Aug 1976
Highest daily mean	69 640	76 690	21 Feb 1970
Peak	125 800	252 200	5 Aug 1973
10 %ile	18 800	15 900	
50 %ile	4 413	3 707	118
95 %ile	0 553	0 466	119
Annual total (million cu m)	251.50	205.80	122
Annual runoff (mm)	1445	1183	122
Annual rainfall (mm)	1715	1565	110
[1941-70 rainfall average (mm)]		1623	

Factors affecting flow regime

● Abstraction for public water supplies

Station description

Velocity-area station. Flat V weir installed 1972. Replaces long term station at Rhayader Q55905

056001 Usk at Chain Bridge

1981

Measuring authority: WELS
First year: 1957

Grid reference: SO 345056
Level sin. (m OD) 22.63

Catchment area (sq km): 911.7
Max alt. (m OD): 886

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	24 510	14 890	66 890	32 980	25 750	24 430	8 257	4 532	4 039	64 280	38 960	34 260
2	22 830	17 460	61 760	29 420	20 370	52 740	8 081	4 450	4 039	57 440	49 100	31 910
3	27 210	71 320	48 500	26 930	27 640	36 020	8 310	4 364	3 990	44 150	43 660	29 350
4	22 300	37 020	35 550	24 760	33 780	29 270	8 092	4 288	3 933	42 610	42 050	26 870
5	20 400	31 380	31 920	23 170	25 820	26 930	7 914	4 352	3 835	33 120	32 450	25 400
6	21 590	27 400	35 890	22 030	25 920	25 760	8 863	6 552	3 738	30 500	28 460	26 330
7	21 660	24 700	126 600	20 800	21 740	23 430	7 853	8 133	3 802	26 920	25 480	37 340
8	19 460	26 580	111 800	20 120	19 530	25 840	7 435	5 887	4 980	104 900	23 030	51 060
9	24 490	48 420	119 300	20 900	17 470	26 560	7 488	5 262	5 179	141 200	20 860	39 190
10	23 110	31 580	210 700	18 410	21 040	21 900	7 405	4 968	5 137	76 820	19 290	33 800
11	19 730	26 850	280 700	17 300	18 050	27 180	6 890	4 650	5 928	58 040	18 640	25 600
12	22 890	27 940	127 100	16 140	15 950	22 540	6 510	4 491	5 582	46 870	18 430	21 720
13	20 510	24 570	137 700	15 590	14 970	20 100	6 310	4 372	4 810	38 010	16 300	24 180
14	64 270	20 970	88 760	14 720	14 210	18 230	6 165	4 279	5 165	32 350	15 260	54 760
15	48 790	19 540	64 210	13 850	14 940	16 770	6 048	4 278	8 949	28 830	14 640	70 690
16	55 590	17 870	52 240	13 140	23 840	15 150	5 944	4 211	7 376	24 960	14 760	43 600
17	44 990	17 850	43 630	12 480	33 960	14 200	5 814	4 034	8 751	23 510	14 940	37 710
18	39 210	16 420	38 500	11 990	38 670	13 450	5 708	3 928	48 120	23 330	85 520	38 540
19	34 190	15 230	34 360	11 520	29 190	12 900	5 560	3 975	109 500	30 210	48 580	26 740
20	31 980	14 600	45 470	11 020	30 530	12 400	5 412	4 287	67 230	82 890	66 240	59 810
21	29 320	14 390	401 800	10 780	25 710	11 700	5 345	5 247	35 400	51 450	43 110	55 070
22	26 820	14 700	247 300	10 450	24 910	10 990	5 465	4 678	28 710	38 090	35 460	37 360
23	24 580	14 590	135 900	10 300	41 510	10 510	6 129	4 638	21 740	31 410	46 560	31 360
24	23 180	13 280	95 680	12 850	32 030	10 170	6 131	4 569	49 960	46 880	73 450	27 560
25	21 500	13 020	129 800	12 920	38 070	9 855	5 502	4 466	48 440	55 240	28 870	24 250
26	19 990	12 550	94 750	18 780	29 220	9 650	5 153	4 337	65 050	40 660	29 580	24 050
27	18 880	17 300	68 770	29 600	33 130	9 356	4 978	4 248	57 230	39 460	81 990	28 160
28	17 640	31 280	61 070	36 190	37 150	9 125	4 974	4 193	36 570	38 400	63 800	30 640
29	16 810		48 080	50 210	28 750	8 691	4 839	4 148	30 290	44 270	52 760	45 810
30	15 900		41 080	34 600	25 450	8 445	4 689	4 083	58 940	48 660	39 520	153 800
31	14 910		36 520		26 890		4 608	4 041		44 570		79 680
Average	27 070	23 630	100 700	20 130	26 330	18 810	6 383	4 643	24 880	48 060	37 730	40 730
Lowest	14 910	12 550	31 920	10 300	14 210	8 445	4 608	3 928	3 738	23 330	14 840	21 720
Highest	64 270	71 320	401 800	50 210	41 510	52 740	8 863	8 133	109 500	141 200	85 520	153 800
Peak flow	126 700	153 600	623 000	55 680	56 350	84 400	9 851	11 470	230 100	182 900	183 300	226 200
Day of peak	14	3	21	29	23	2	6	6	19	9	18	23
Monthly total (million cu m)	72.51	57.17	269.70	52.18	70.51	48.75	17.10	12.44	64.49	128.70	97.78	109.10
Runoff (mm)	80	63	296	57	77	53	19	14	71	141	107	120
Rainfall (mm)	72	90	303	68	138	52	38	41	259	183	112	136

Statistics of monthly data for previous record (Mar 1957 to Dec 1980)

Mean flows	Avg	49 990	44 060	32 030	22 840	16 980	10 690	8 354	10 210	16 160	26 920	38 320	49 720
	Low	10 850	12 690	10 010	8 122	6 301	4 274	3 390	2 699	2 941	4 303	16 030	20 380
	(year)	1964	1963	1962	1974	1980	1957	1976	1976	1958	1978	1975	1963
	High	88 650	95 710	74 270	45 110	32 750	26 740	27 490	18 790	45 680	86 350	99 840	112 700
	(year)	1974	1958	1963	1960	1967	1972	1968	1958	1974	1967	1960	1959
Runoff	Avg	147	118	94	65	50	30	25	30	46	79	109	146
	Low	32	34	29	23	19	12	10	8	8	13	46	60
	High	260	254	218	128	96	76	81	49	130	254	284	331
Rainfall	Avg	156	119	105	85	90	75	83	94	122	127	148	166
	Low	28	11	15	10	31	17	27	25	8	19	74	46
	High	331	223	206	175	221	137	137	168	257	325	323	351

Summary statistics

Factors affecting flow regime

● Reservoir(s) in catchment

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	31 720	27 120	117
Lowest yearly mean		14 880	1973
Highest yearly mean		44 050	1960
Lowest monthly mean	4 643	2 699	Aug 1976
Highest monthly mean	100 700	112 700	Dec 1959
Lowest daily mean	3 738	1 607	27 Aug 1976
Highest daily mean	401 800	585 400	27 Dec 1979
Peak	623 000	945 000	27 Dec 1979
10 %ile	61 140	62 500	
50 %ile	24 110	18 170	98
95 %ile	4 284	4 418	97
Annual total (million cu m)	1000 00	855 80	117
Annual runoff (mm)	1097	939	117
Annual rainfall (mm)	1492	1370	109
[1941-70 rainfall average (mm)]		1415]	

Station description

Velocity-area station Intake to canal upstream of gauge Low flows measured accurately at alternative station 056010 Trostrey weir

062001 Teifi at Glan Teifi

1981

Measuring authority WELS
First year 1959

Grid reference SN 244416
Level sin (m OD) 5 18

Catchment area (sq km) 893 6
Max alt (m OD) 595

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	28 220	16 060	44 380	31 230	10 890	20 960	5 538	4 069	2 762	162 100	60 590	51 380
2	24 630	19 450	53 070	27 050	9 737	38 300	5 395	3 808	2 721	211 900	67 750	43 800
3	23 480	47 350	43 120	23 940	12 280	31 340	5 359	3 587	2 678	212 800	65 310	38 390
4	21 360	41 210	37 620	21 270	21 560	26 580	5 180	3 406	2 601	183 300	62 900	34 480
5	19 390	32 800	34 880	19 380	19 570	21 850	5 116	3 281	2 526	115 600	57 310	32 630
6	23 810	27 330	34 790	17 830	17 850	19 220	4 954	3 236	2 453	80 200	45 470	44 180
7	25 630	23 880	57 190	16 370	15 500	18 560	4 777	3 388	2 450	67 350	40 070	72 190
8	21 110	28 510	77 480	16 080	13 630	19 130	4 563	3 623	2 450	143 800	33 920	87 540
9	23 100	47 160	110 900	16 230	11 570	18 120	4 382	3 438	2 519	194 900	27 060	72 800
10	23 700	42 250	182 600	15 000	10 590	17 730	4 274	3 124	2 973	152 400	23 510	54 430
11	20 160	38 250	239 100	13 750	9 976	20 990	4 211	3 020	3 751	119 900	21 840	47 240
12	21 790	35 820	211 500	12 970	9 306	18 150	4 144	2 932	4 236	90 790	21 220	39 280
13	31 870	30 550	171 900	12 280	8 784	16 780	4 058	2 856	4 041	65 650	18 530	42 330
14	43 650	26 100	120 900	11 340	8 575	16 080	3 937	2 856	5 359	53 050	16 640	65 160
15	46 190	23 760	84 530	10 520	12 550	15 020	3 809	2 856	10 990	43 920	15 890	69 630
16	52 710	21 980	66 240	9 875	16 110	13 590	3 850	2 850	8 855	36 220	16 140	52 750
17	44 090	20 070	54 590	9 367	21 090	12 710	3 888	2 756	10 890	29 950	15 240	42 910
18	43 540	18 190	45 970	8 951	22 150	11 960	3 871	2 751	28 580	25 960	55 500	34 620
19	37 870	16 800	40 470	8 615	20 000	11 570	3 918	2 858	64 340	40 850	45 580	39 310
20	36 240	15 640	53 630	8 302	21 530	10 910	3 934	4 636	85 190	87 290	45 090	97 520
21	43 620	15 340	198 400	8 002	20 160	10 240	3 999	5 832	57 080	136 100	36 110	72 690
22	42 080	14 940	247 000	7 822	24 410	8 529	6 111	5 002	44 280	124 400	30 300	56 350
23	38 460	17 350	188 200	7 596	30 860	7 879	17 210	6 351	31 630	87 210	41 570	46 150
24	33 800	15 660	131 800	13 260	26 040	7 422	15 670	5 253	32 040	96 140	37 990	40 320
25	29 690	13 760	107 300	10 540	26 890	7 121	13 020	4 122	29 820	124 600	31 580	35 360
26	27 280	12 860	96 220	10 390	29 020	6 808	8 793	3 679	48 990	110 000	33 980	37 980
27	25 160	14 360	74 370	9 626	38 660	6 620	6 850	3 394	48 150	85 260	50 660	40 340
28	22 260	19 040	61 720	10 080	33 740	6 320	5 795	3 145	44 340	73 440	52 540	37 120
29	20 200		49 520	12 850	29 320	5 966	5 064	3 010	48 230	70 720	48 650	44 370
30	18 460		42 480	12 800	25 520	5 716	4 565	2 896	73 800	71 670	55 790	50 060
31	17 060		36 950		23 400		4 318	2 815		70 850		45 840
Average	30 020	24 870	96 730	13 780	19 460	15 070	5 824	3 577	23 690	102 000	38 390	50 620
Lowest	17 060	12 860	34 790	7 596	8 575	5 716	3 821	2 751	2 450	25 960	15 240	32 630
Highest	52 710	47 350	247 000	31 230	38 660	38 300	17 210	6 351	85 190	212 800	67 750	97 520
Peak flow	58 600	55 100	279 100	34 710	40 590	40 640	22 790	6 495	126 700	217 300	70 650	104 800
Day of peak	16	3	22	1	27	2	23	22	30	3	2	20
Monthly total (million cu m)	80 40	60 18	259 10	35 71	52 12	39 07	15 60	9 58	61 41	273 20	101 10	135 60
Runoff (mm)	90	67	290	40	58	44	17	11	69	306	113	152
Rainfall (mm)	86	89	312	49	124	56	71	44	235	293	116	126

Statistics of monthly data for previous record (Jul 1959 to Dec 1980—incomplete or missing months total 0.3 years)

Mean flows	Avg	47 370	41 010	27 550	22 690	19 440	11 710	8 595	12 750	16 440	31 190	45 780	53 310
	Low	7 086	11 140	8 281	7 481	4 301	3 537	1 878	1 128	1 072	3 887	20 040	17 820
	(year)	1963	1965	1962	1974	1980	1976	1976	1976	1959	1972	1964	1963
	High	106 000	81 100	58 650	35 490	36 780	47 700	24 930	29 350	48 680	81 980	78 080	93 960
	(year)	1974	1974	1963	1966	1979	1972	1968	1966	1974	1967	1977	1965
Runoff	Avg	142	112	83	66	58	34	26	36	48	94	133	160
	Low	21	30	25	22	13	10	6	3	3	12	58	53
	High	318	220	176	103	110	121	75	88	141	252	226	282
Rainfall	Avg	147	98	91	89	80	78	82	98	112	140	155	157
	Low	28	12	25	19	29	17	25	16	10	40	76	28
	High	326	213	180	163	168	147	140	168	242	271	279	315

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre 1981
Mean flow (m ³ s ⁻¹)	35 610	28 050	127
Lowest yearly mean		18 860	1964
Highest yearly mean		38 230	1974
Lowest monthly mean	3 577	1 072	Sep 1959
Highest monthly mean	102 000	106 000	Jan 1974
Lowest daily mean	2 450	0 731	29 Aug 1976
Highest daily mean	247 000	275 100	27 Dec 1979
Peak	279 100	303 300	27 Dec 1979
10 %ile	75 680	61 640	123
50 %ile	22 470	19 110	118
95 %ile	2 937	3 273	90
Annual total (million cu m)	1123 00	885 20	127
Annual runoff (mm)	1257	991	127
Annual rainfall (mm)	1601	1327	121
[1941-70 rainfall average (mm)]		1333]	

Station description

Velocity-area station

Factors affecting flow regime

- Reservoir(s) in catchment
- Abstraction for public water supplies

065001 Glaslyn at Beddgelert**1981**Measuring authority: WELS
First year: 1961Grid reference: SH 592478
Level sin. (m OD) 32.95Catchment area (sq km): 68.6
Max alt. (m OD) 1090**Daily mean gauged discharges (cubic metres per second)**

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	5.315	1.778	1.789	2.416	4.228	2.177	1.656	1.403	1.208	31.910	13.940	6.159
2	11.600	13.940	1.893	2.472	2.745	6.025	1.624	1.022	1.092	22.120	16.030	4.365
3	9.181	11.810	1.720	1.922	14.600	3.347	1.570	0.817	1.061	9.130	16.950	3.734
4	5.073	7.033	1.507	1.302	8.620	5.056	1.292	0.846	0.990	5.612	8.622	3.884
5	4.134	5.471	3.982	1.021	5.404	4.085	5.453	0.721	0.916	4.209	5.172	4.869
6	6.357	4.613	14.050	0.858	4.381	5.433	4.294	0.636	0.810	3.527	3.990	5.575
7	4.832	3.557	49.050	0.781	3.444	9.292	3.574	0.561	1.512	21.960	2.895	7.649
8	4.221	7.736	17.330	0.759	2.839	16.970	2.516	0.521	2.274	49.800	2.014	4.903
9	5.649	9.865	17.900	0.746	2.166	9.720	1.911	0.476	1.642	39.440	1.893	3.998
10	3.832	5.879	70.170	0.683	1.656	7.994	1.796	0.475	1.758	16.530	2.385	3.497
11	2.793	4.576	27.520	0.596	1.469	18.240	3.598	0.406	2.278	8.899	5.059	2.969
12	3.467	5.267	12.580	0.610	1.504	6.882	2.610	0.391	2.237	6.814	4.363	2.076
13	14.120	4.476	7.637	0.560	1.508	9.346	1.857	2.045	1.764	4.938	3.346	1.894
14	22.640	3.117	5.091	0.457	1.453	32.740	1.564	2.314	11.520	4.013	2.464	5.659
15	8.624	2.215	3.643	0.403	1.671	12.310	1.444	1.491	7.727	3.293	2.407	5.049
16	8.748	2.012	3.364	0.367	2.250	4.969	1.546	1.128	4.404	2.680	3.178	3.300
17	8.414	1.953	3.421	0.353	1.997	3.539	2.201	0.889	8.892	2.214	19.980	2.595
18	10.090	1.747	3.566	0.332	2.244	2.953	2.003	0.744	9.549	3.874	33.440	2.231
19	6.375	1.566	9.966	0.321	2.084	3.424	2.393	3.133	31.180	15.320	7.065	1.853
20	6.181	1.432	12.380	0.300	3.151	2.688	6.228	3.773	12.450	14.710	7.720	4.627
21	11.840	1.317	84.430	0.285	3.083	2.059	10.650	4.036	6.463	16.400	6.302	3.969
22	6.155	1.133	24.890	0.282	6.214	1.787	45.280	8.578	4.560	8.043	5.530	3.001
23	4.580	1.065	20.640	0.346	7.372	1.792	24.940	4.567	10.200	5.178	18.310	2.478
24	4.864	1.074	23.070	1.835	3.951	1.792	6.668	2.713	11.970	10.600	6.674	2.323
25	3.559	1.079	22.690	2.946	3.137	1.712	3.955	2.044	18.850	11.760	5.860	1.945
26	4.200	1.049	15.780	2.061	4.368	1.851	3.087	1.664	16.050	17.760	34.170	2.242
27	4.419	1.117	7.644	2.514	4.061	1.791	2.484	1.435	28.000	8.813	20.430	1.969
28	3.657	1.327	5.154	11.230	3.358	1.195	2.284	1.274	7.330	11.490	6.399	1.836
29	3.271		4.023	3.648	3.435	1.058	2.073	1.127	6.450	7.159	4.526	2.686
30	3.038		3.534	5.581	2.644	1.486	1.880	5.053	14.190	9.495	9.043	5.811
31	2.468		3.340		2.141		1.730	1.564		6.316		4.380
Average	6.569	3.897	15.600	1.600	3.651	6.124	5.037	1.864	7.644	12.390	9.337	3.662
Lowest	2.468	1.049	1.507	0.282	1.453	1.058	1.292	0.391	0.810	2.214	1.893	1.836
Highest	22.640	13.940	84.430	11.230	14.600	32.740	45.280	8.578	31.180	49.800	34.170	7.649
Peak flow	34.300	34.160	136.700	19.910	25.490	64.520	68.350	31.870				
Day of peak	14	2	21	28	3	14	22	30				
Monthly total (million cu m)	17.60	9.43	41.80	4.15	9.78	15.87	13.49	4.99	19.81	33.18	24.20	9.81
Runoff (mm)	256	137	609	60	143	231	197	73	289	484	353	143
Rainfall (mm)	283	146	638	92	195	278	239	141	438	563	371	162

Statistics of monthly data for previous record (Dec 1961 to Dec 1980—incomplete or missing months total 1.7 years)

Mean flows	Avg	7.458	5.964	5.059	3.912	3.636	3.295	3.494	4.988	5.688	6.135	8.707	8.895
	Low	1.535	1.369	1.796	0.814	0.325	1.366	0.779	0.248	0.355	1.984	4.072	1.793
	(year)	1963	1965	1969	1974	1980	1967	1979	1976	1972	1972	1968	1963
	High	12.750	13.040	9.194	8.228	6.790	7.429	7.132	7.972	11.830	13.370	14.460	16.400
	(year)	1975	1977	1979	1975	1979	1971	1978	1978	1974	1980	1980	1965
Runoff	Avg	291	212	198	148	142	125	136	195	215	240	329	347
	Low	60	48	70	31	13	52	30	10	13	77	154	70
	High	498	460	359	311	265	281	278	311	447	572	546	640
Rainfall	Avg	302	209	214	199	191	200	216	261	282	295	376	340
	Low	28	41	127	20	39	78	89	16	67	136	194	74
	High	512	475	444	482	334	358	380	437	508	726	564	700

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	6.472	5.602	116
Lowest: yearly mean		4.185	1968
Highest: yearly mean		6.942	1980
Lowest: monthly mean	1.600	0.248	Aug 1976
Highest: monthly mean	15.600	16.400	Dec 1965
Lowest: daily mean	0.282	0	7 Sep 1976
Highest: daily mean	84.430	85.850	27 Oct 1980
Peak	136.700	127.500	21 Nov 1980
10 %ile	15.350	12.730	121
50 %ile	3.581	3.198	112
95 %ile	0.611	0.591	103
Annual total (million cu m)	204.10	176.80	115
Annual runoff (mm)	2975	2577	115
Annual rainfall (mm)	3546	3085	115
[1941-70 rainfall average (mm)]		2966]	

Factors affecting flow regime

● Regulation for HEP

Station description
Velocity-area station

067015 Dee at Manley Hall

1981

Measuring authority WELS
First year 1970

Grid reference SJ 348415
Level stn (m OD) 25.35

Catchment area (sq km) 1019.3
Max alt (m OD) 884

Daily mean gauged discharges (cubic metres per second)												
DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	46 360	15 040	31 110	34 750	17 730	20 230	8 879	9 309	7 790	97 180	48 250	58 480
2	47 590	22 650	32 340	31 410	15 460	32 520	8 712	9 262	8 005	87 190	58 190	49 890
3	57 500	82 240	30 740	28 710	20 440	24 080	8 780	9 318	8 057	69 960	57 520	43 640
4	51 170	58 140	26 320	25 280	30 600	21 780	8 445	9 161	8 130	50 790	49 160	45 120
5	47 270	45 460	24 940	22 120	27 210	19 900	8 127	8 669	8 118	38 870	40 990	52 160
6	47 990	38 480	27 260	19 390	24 670	17 030	9 575	10 480	8 204	33 810	35 390	55 370
7	42 270	34 050	60 560	16 330	21 940	16 360	8 920	10 130	8 485	33 290	31 460	61 170
8	38 880	64 310	81 190	13 510	20 790	17 930	9 276	8 647	9 014	74 730	28 540	51 840
9	45 580	90 980	74 720	12 640	18 710	20 160	9 894	8 202	8 579	142 800	26 570	45 510
10	43 410	72 720	99 370	12 070	17 840	20 450	9 703	8 073	8 458	147 900	24 620	39 700
11	39 200	60 760	140 600	11 330	15 430	23 740	9 255	7 859	8 368	123 400	24 890	36 470
12	41 630	61 160	125 800	10 960	13 760	28 030	9 365	7 759	8 041	82 100	24 560	33 200
13	38 980	55 900	103 900	10 590	14 430	27 630	9 162	7 871	8 194	60 510	23 190	31 430
14	83 100	48 330	77 130	9 755	15 520	23 970	9 274	8 118	8 531	47 830	21 850	41 890
15	79 950	43 250	64 220	9 138	14 920	29 710	9 623	8 225	9 196	39 840	20 560	54 690
16	77 370	39 940	53 530	9 112	22 690	27 460	10 210	8 058	9 258	33 930	20 110	46 650
17	82 390	33 040	46 760	9 047	19 010	21 620	10 340	7 896	9 593	29 950	22 530	40 750
18	75 850	27 840	43 100	8 778	20 070	17 930	10 060	7 897	14 780	26 900	88 730	35 810
19	66 140	24 100	49 080	8 574	18 770	14 290	9 895	7 998	34 250	31 910	80 270	32 780
20	55 380	21 460	53 870	8 501	19 820	12 060	9 974	8 120	46 770	75 870	72 850	36 490
21	51 460	19 680	135 200	8 279	19 520	11 060	10 190	8 267	41 920	77 110	59 930	34 650
22	43 910	18 230	214 300	8 062	17 670	10 780	11 290	8 246	35 270	61 990	49 380	28 950
23	38 240	16 970	202 900	8 199	19 240	9 831	20 880	8 230	26 360	50 250	56 170	24 530
24	33 890	16 120	150 700	11 700	19 360	9 361	19 730	7 897	24 950	61 540	50 950	21 730
25	30 320	14 430	118 200	11 900	26 860	8 987	16 940	7 786	28 550	67 930	42 730	19 220
26	27 700	13 510	103 100	11 110	26 630	8 396	11 240	8 135	47 250	59 590	49 110	17 880
27	24 570	14 170	78 240	13 140	23 760	9 235	8 900	8 239	48 150	52 390	97 990	18 420
28	22 380	22 530	64 800	19 760	30 670	9 981	8 991	8 261	52 080	50 010	88 620	18 500
29	20 250		52 450	29 030	32 230	9 469	8 951	8 292	44 970	50 250	75 690	26 290
30	18 080		44 650	20 930	24 270	9 067	8 981	8 259	40 970	51 310	67 820	40 840
31	16 490		38 850		21 520		9 152	8 107		52 620		44 080
Average	46 280	38 410	79 030	15 140	21 020	17 750	10 400	8 411	21 010	63 350	47 950	38 330
Lowest	16 490	13 510	24 940	8 062	13 760	8 396	8 127	7 759	7 790	26 900	20 110	17 880
Highest	83 100	90 980	214 300	34 750	32 230	32 520	20 880	10 460	52 080	147 900	97 990	61 170
Peak flow	112 600	127 000	250 000	36 190	34 710	37 900	23 320	10 960	86 600	163 600	121 500	66 650
Day of peak	14	3	22	1	28	2	23	6	19	9	18	1
Monthly total (million cu m)	124.00	92.92	211.70	39.23	56.29	46.01	27.87	22.53	54.46	169.70	124.30	102.70
Runoff (mm)	122	91	208	38	55	45	27	22	53	166	122	101
Rainfall (mm)	115	111	233	57	112	77	67	44	198	221	151	120

Statistics of monthly data for previous record (Feb 1970 to Dec 1980)												
Mean flows	Avg	47 420	48 630	33 610	25 350	15 110	12 740	11 050	16 080	19 090	28 810	47 910
	Low	18 900	26 020	14 870	8 691	8 308	7 704	8 509	7 086	9 422	8 730	20 130
	(year)	1973	1979	1976	1974	1974	1974	1971	1976	1972	1975	1971
	High	82 990	83 990	83 610	61 030	27 620	31 240	17 430	25 630	50 150	53 600	78 380
Runoff	Avg	125	116	88	64	40	32	29	42	49	76	122
	Low	50	62	39	22	22	20	22	19	24	23	51
	High	218	199	220	155	73	79	46	67	128	141	199
												250
Rainfall	Avg	154	118	112	83	78	80	85	100	125	127	169
	Low	50	37	54	10	39	16	31	9	45	43	93
	High	287	236	223	182	151	150	144	157	306	218	249
												314

Summary statistics				Factors affecting flow regime			
		for 1981	For record preceding 1981			1981	
						As % of pre-1981	
Mean flow (m ³ s ⁻¹)		33 980	29 580			115	● Reservoir(s) in catchment
Lowest yearly mean			21 980			1975	● Abstraction for public water supplies
Highest yearly mean			38 040			1974	● Flow reduced by industrial and/or agricultural abstractions
Lowest monthly mean	8 411	Aug	7 086			Aug 1976	● Augmentation from surface water and/or groundwater
Highest monthly mean	79 030	Mar	95 000			Dec 1979	
Lowest daily mean	7 759	12 Aug	4 772			7 Sep 1976	
Highest daily mean	214 300	22 Mar	237 700			19 Oct 1971	
Peak	250 000	22 Mar	275 600			19 Oct 1971	
10 %ile	73 060		64 570			113	
50 %ile	24 570		18 230			135	
95 %ile	8 114		7 784			104	
Annual total (million cu m)	1072.00		933.50			115	
Annual runoff (mm)	1051		916			115	
Annual rainfall (mm)	1508		1382			109	
[1941-70 rainfall average (mm)]			1403]				

Station description
Asymmetrical compound Crump weir, superseding Erbstock. 067902. 1 km downstream. An extended data series by sequential combination with 067902 is available as 067715

068001 Weaver at Ashbrook

1981

Measuring authority: NWWA Grid reference: SJ 670633 Catchment area (sq km): 622.0
First year: 1937 Level stn. (m OD): 16.31 Max alt. (m OD): 222

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	6.361	4.570	15.980	7.996	4.017	3.594	2.239	1.667	1.565	7.791	6.279	15.920
2	11.910	5.081	18.130	6.966	3.437	19.060	2.304	1.630	1.525	7.038	5.887	10.330
3	9.672	9.216	10.740	5.785	3.795	10.960	2.514	1.636	1.519	4.375	5.500	8.196
4	6.771	9.570	7.976	5.131	4.176	5.569	2.163	1.649	1.495	3.965	5.551	11.330
5	5.652	9.369	6.604	4.718	4.067	4.132	2.060	2.757	1.450	3.613	4.705	10.540
6	27.700	7.530	6.268	4.567	4.367	3.793	2.207	13.880	1.416	6.087	4.287	12.990
7	23.300	5.981	7.073	4.750	3.807	3.781	2.044	8.456	1.464	6.424	3.970	16.830
8	13.310	6.896	7.733	4.627	3.425	3.377	1.994	4.679	1.558	6.834	3.709	12.630
9	10.920	38.680	11.670	4.814	3.426	3.256	2.030	3.306	1.539	11.300	3.520	9.170
10	9.752	33.400	29.780	4.434	3.408	3.085	1.997	2.764	2.782	10.030	3.343	7.521
11	7.747	17.400	43.650	4.194	3.456	3.245	1.886	2.393	3.084	10.290	3.442	7.522
12	11.010	12.300	32.550	4.028	3.007	3.123	1.908	2.186	3.333	12.310	3.324	6.423
13	10.470	9.443	19.240	3.872	2.939	2.832	1.853	2.115	2.288	13.440	3.193	7.950
14	32.570	7.309	18.660	3.553	2.808	3.648	1.829	2.019	2.491	9.049	3.057	9.696
15	31.400	6.731	17.620	3.363	2.823	4.001	1.834	1.961	2.936	5.740	3.710	15.070
16	24.510	6.920	13.350	3.254	4.082	3.087	2.060	1.836	2.211	4.457	3.146	11.830
17	24.530	6.438	10.670	3.179	3.569	2.846	2.272	1.795	2.198	3.728	3.484	7.815
18	18.780	5.915	8.865	3.039	3.417	2.579	2.064	1.807	3.905	3.479	29.640	5.495
19	15.480	5.250	7.613	2.881	3.304	2.548	1.996	2.088	7.052	6.874	21.980	5.404
20	11.790	4.848	6.418	2.817	7.782	2.545	2.124	2.168	8.959	30.390	13.240	13.330
21	17.490	4.599	16.730	2.767	6.910	2.462	2.459	1.900	3.704	23.260	9.876	18.380
22	13.390	4.582	38.560	2.863	4.504	2.393	3.459	2.926	2.786	12.600	3.077	13.720
23	10.660	4.803	31.420	2.861	4.311	2.311	3.564	2.576	2.418	7.507	14.520	9.059
24	8.707	5.208	22.790	5.684	3.736	2.418	2.500	2.128	2.473	26.620	13.540	6.856
25	7.372	4.795	15.960	8.700	4.448	2.374	2.145	1.900	2.651	32.780	9.007	5.605
26	6.385	4.472	24.320	5.761	4.882	2.306	2.038	1.843	11.550	17.840	7.624	4.980
27	5.819	4.538	14.920	4.572	4.638	2.215	1.986	1.874	9.422	12.790	11.010	5.195
28	5.504	10.420	11.500	4.185	5.982	2.161	1.885	1.723	5.578	9.025	11.450	8.362
29	5.185		9.075	3.933	4.678	2.170	1.776	1.777	4.810	7.222	9.003	30.110
30	5.118		7.537	3.878	3.986	2.155	1.728	1.673	7.007	9.426	19.010	47.600
31	4.825		6.865		3.800		1.720	1.611		8.534		43.460
Average	13.040	9.152	16.110	4.439	4.095	3.801	2.150	2.731	3.572	10.800	8.101	12.870
Lowest	4.825	4.472	6.268	2.767	2.808	2.155	1.720	1.611	1.416	3.479	3.057	4.980
Highest	32.570	38.680	43.650	8.700	7.782	19.060	3.564	13.880	11.550	32.780	29.640	47.600
Peak flow	39.080	44.800	46.880	10.540	10.900	24.610	4.242	15.760	15.560	40.700	34.830	52.390
Day of peak	6	9	11	25	20	2	22	6	26	24	18	30
Monthly total (million cu m)	34.91	22.14	43.14	11.51	10.97	9.85	5.76	7.31	9.26	28.93	21.00	34.46
Runoff (mm)	56	36	69	19	18	16	9	12	15	47	34	55
Rainfall (mm)	72	53	111	39	70	42	36	67	110	99	67	71

Statistics of monthly data for previous record (Oct 1937 to Dec 1980—Incomplete or missing months total 18 years)

Mean flows	Avg	10.230	9.635	6.404	4.600	3.779	2.712	2.900	3.123	3.462	4.468	7.809	9.237
	Low	1.965	2.376	2.183	1.490	0.903	1.125	0.736	0.641	0.919	1.184	1.303	2.429
	(year)	1964	1965	1938	1938	1946	1967	1976	1976	1964	1947	1942	1947
	High	21.950	19.860	18.580	9.083	22.720	6.995	12.750	8.404	16.990	15.970	22.540	27.250
	(year)	1939	1980	1947	1965	1969	1954	1968	1971	1957	1954	1954	1965
Runoff	Avg	44	38	28	19	16	11	12	13	14	19	33	40
	Low	8	9	9	6	4	5	3	3	4	5	5	10
	High	95	80	80	38	98	29	55	36	71	69	94	96
Rainfall	Avg	68	52	49	48	61	58	71	73	66	68	77	71
	Low	18	8	18	2	18	13	16	6	5	15	13	10
	High	145	145	127	89	194	142	168	175	169	137	170	152

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	7.586	5.678	134
Lowest yearly mean		2.752	1964
Highest yearly mean		9.209	1954
Lowest monthly mean	2.150	0.641	Aug 1976
Highest monthly mean	16.110	22.720	May 1969
Lowest daily mean	1.416	0.394	17 Aug 1976
Highest daily mean	47.600	84.950	9 Feb 1946
Peak	52.390	212.400	8 Feb 1946
10 %ile	16.410	12.340	
50 %ile	4.745	3.221	
95 %ile	1.743	1.112	
Annual total (million cu m)	239.20	179.70	133
Annual runoff (mm)	385	288	133
Annual rainfall (mm)	837	762	110
[1941-70 rainfall average (mm)]		754	

Factors affecting flow regime

- Flow influenced by groundwater abstraction and/or recharge
- Abstraction for public water supplies
- Augmentation from effluent returns

Station description

Velocity-area station. In 1978 V shaped bed control of steel piles with capping installed

071001 Ribble at Samlesbury

1981

Measuring authority: NWWA Grid reference: SD 589304 Catchment area (sq km): 1145.0
First year: 1960 Level stn: (m OD) 6.00 Max alt: (m OD) 680

Daily mean gauged discharges (cubic metres per second)

OAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	86 940	15 170	29 270	16 850	22 260	13 120	5 874	4 300	5 362	321 700	81 690	144 200
2	365 700	163 400	61 380	15 400	13 800	58 790	5 413	4 003	5 301	140 800	111 500	96 270
3	162 600	156 800	32 140	13 760	56 910	30 300	5 321	3 924	5 372	69 840	46 890	50 240
4	61 410	69 580	18 270	17 130	32 890	17 670	4 998	3 974	5 517	90 520	40 050	78 900
5	39 670	42 220	15 520	11 300	19 300	20 910	10 270	4 024	5 729	42 600	34 090	63 490
6	45 040	37 780	102 800	10 440	29 650	18 660	20 980	31 650	5 609	67 090	28 920	30 710
7	34 040	31 960	218 000	10 040	18 480	21 530	8 848	26 410	5 725	104 600	23 590	29 120
8	40 180	51 250	112 700	9 748	14 810	25 920	6 396	14 600	6 440	198 400	18 730	23 450
9	59 570	94 670	66 480	9 990	12 270	32 230	5 330	12 200	5 698	244 400	15 340	18 390
10	34 710	43 530	229 100	8 970	11 870	44 140	4 645	9 190	6 400	149 800	25 360	17 450
11	24 980	28 490	192 100	10 010	10 870	85 600	4 397	6 794	9 891	123 800	160 600	16 560
12	46 100	24 840	103 600	10 590	9 253	40 640	4 233	5 700	7 266	70 350	139 300	15 680
13	56 210	23 190	50 970	8 710	9 175	22 530	4 082	5 555	5 981	58 030	90 870	17 130
14	216 300	18 560	33 610	7 522	9 640	57 450	3 897	19 000	12 330	47 470	51 270	14 050
15	64 770	16 120	26 890	6 955	8 997	39 910	3 873	16 410	31 320	37 910	26 540	14 050
16	86 110	15 390	21 970	6 604	10 640	21 260	4 341	11 510	12 410	29 980	16 830	14 050
17	211 900	13 980	19 210	6 158	8 939	15 230	7 384	6 916	10 880	22 160	92 020	14 050
18	72 310	12 920	87 790	5 752	8 747	12 410	7 623	26 850	54 750	16 690	148 300	21 210
19	68 230	11 660	288 800	5 489	10 150	12 330	8 583	69 850	93 130	89 460	54 760	19 130
20	45 610	10 730	150 700	5 340	10 130	11 300	45 640	50 740	99 030	90 720	63 990	32 430
21	78 850	9 909	393 000	5 320	13 150	9 260	48 220	20 260	52 160	51 270	50 030	29 720
22	52 820	9 213	261 700	5 384	11 570	8 301	42 820	15 300	34 180	24 440	58 190	20 650
23	38 870	8 923	281 000	5 773	18 960	7 555	28 210	11 720	32 720	16 260	119 400	22 700
24	35 040	8 525	126 400	18 410	22 240	7 141	18 030	8 936	47 960	49 220	68 920	16 430
25	28 070	8 071	105 800	58 180	20 270	6 784	11 470	7 545	26 440	68 420	58 920	13 510
26	47 810	7 885	84 150	27 120	17 290	6 306	9 215	8 765	199 900	32 330	276 700	13 800
27	40 230	7 710	42 990	28 520	21 730	6 024	8 080	6 144	134 400	59 880	189 200	11 850
28	26 880	16 960	30 070	49 390	28 590	5 692	6 916	5 796	112 600	82 520	112 300	15 500
29	21 880	22 920	51 760	15 860	5 724	5 873	5 697	55 770	85 910	53 160	71 310	
30	19 170	19 190	38 960	11 790	6 119	5 072	5 484	73 530	106 200	127 600	102 900	
31	17 180		16 660	11 870		4 655	5 299		118 300		131 400	
Average	71 910	34 260	104 700	16 020	16 840	22 360	11 640	13 950	38 790	87 450	79 500	37 910
Lowest	17 180	7 710	15 520	5 320	8 747	5 692	3 873	3 924	5 301	16 260	15 340	11 850
Highest	365 700	163 400	393 000	58 180	56 910	85 600	48 220	69 850	199 900	321 700	276 700	144 200
Peak flow	502 400	513 100	643 300	81 100	114 900	140 200	110 400	159 100	399 400	402 600	543 200	173 200
Day of peak	2	2	21	25	3	2	20	19	26	1	26	31
Monthly total (million cu m)	192.60	82.89	280.40	41.52	45.11	57.96	31.16	37.37	100.60	234.20	206.10	101.50
Runoff (mm)	168	72	245	36	39	51	27	33	88	205	180	89
Rainfall (mm)	164	88	280	57	88	89	72	75	199	217	174	74

Statistics of monthly data for previous record (May 1960 to Dec 1980)

Mean flows	Avg	47 020	38 840	30 510	27 710	19 680	13 290	16 910	24 700	30 730	38 670	53 100	53 990
	Low	10 610	9 565	11 790	5 601	4 048	5 031	4 578	2 958	5 782	5 716	25 140	15 190
	(year)	1963	1965	1975	1974	1980	1975	1976	1976	1977	1977	1962	1971
	High	75 970	80 890	67 900	54 820	46 460	33 520	40 220	68 920	65 820	118 400	88 610	170 200
	(year)	1965	1966	1979	1970	1967	1966	1960	1967	1968	1967	1963	1965
Runoff	Avg	110	83	71	63	46	30	40	58	70	90	120	126
	Low	25	20	28	13	9	11	11	7	13	13	57	36
	High	178	171	159	124	109	76	94	161	149	277	201	281
Rainfall	Avg	127	92	97	79	87	90	97	105	138	132	148	142
(1964)	Low	63	17	51	3	16	27	52	20	48	50	88	43
1980)	High	196	189	181	171	178	166	158	169	277	304	221	278

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	44 760	32 900	136
Lowest yearly mean		22 040	1971
Highest yearly mean		45 020	1967
Lowest monthly mean	11 640	2 958	Aug 1976
Highest monthly mean	104 700	120 700	Dec 1965
Lowest daily mean	3 873	2 106	28 Aug 1976
Highest daily mean	393 000	675 000	27 Oct 1980
Peak	643 300	810 000	27 Oct 1980
10 %ile	110 500	80 370	137
50 %ile	21 670	16 320	133
95 %ile	5 313	4 583	116
Annual total (million cu m)	1412.00	1038.00	136
Annual runoff (mm)	1233	907	136
Annual rainfall (mm)	1577	1334	118
(1941-70 rainfall average (mm))		1329	

Factors affecting flow regime

- Reservoir(s) in catchment
- Augmentation from effluent returns

Station description

Original a velocity-area station. A compound weir for more accurate measurement of low and medium discharges was completed in 1970 with Crump profile flat V centre section and horizontal flank weirs of Crump profile. Velocity-area station became the primary gauging site in 1981 due to vandalism at the weir site.

073010 Leven at Newby Bridge

1981

Measuring authority: NWWA Grid reference: SD 367863 Catchment area (sq km): 247.0
First year: 1939 Level stn. (m OD) 37.28 Max alt. (m OD): 873

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	30 770	6 847	5 833	14 760	7 493	7 799	1 857	3 965	1 607	50 440	24 470	31 160
2	42 220	12 750	9 216	12 340	6 661	8 717	2 054	3 314	1 367	58 870	38 420	26 430
3	55 360	32 670	9 523	10 450	9 411	8 922	2 179	2 765	1 652	55 110	36 920	22 340
4	48 470	33 090	9 137	8 657	12 120	10 690	2 051	2 838	1 359	47 140	34 790	20 980
5	39 780	29 180	9 586	7 504	11 390	13 850	2 672	7 753	1 300	39 440	28 660	19 000
6	33 130	23 960	14 160	6 399	11 540	15 490	4 167	2 826	1 358	31 550	24 270	16 610
7	26 150	21 470	31 420	5 367	11 830	17 570	5 160	2 526	1 248	28 410	20 330	14 440
8	21 630	19 450	46 840	4 788	11 380	23 170	5 127	2 307	1 339	34 080	16 980	12 790
9	20 400	17 060	45 570	4 149	11 220	27 890	4 980	2 317	1 737	62 450	14 070	10 730
10	17 940	14 620	55 960	3 926	10 290	26 260	4 244	1 873	1 340	67 890	13 160	9 340
11	15 030	12 460	62 310	3 823	9 503	27 600	5 072	1 749	2 244	58 060	22 060	7 822
12	13 810	11 320	55 070	4 177	8 078	26 870	5 181	1 731	2 914	47 730	23 620	6 770
13	12 240	10 270	45 580	3 760	7 261	28 190	4 581	1 943	2 611	39 100	21 170	6 232
14	27 400	9 175	36 890	3 352	6 282	32 100	3 982	2 568	3 296	32 130	18 370	6 215
15	26 210	8 267	28 640	2 754	5 901	29 330	3 522	2 593	4 336	24 260	16 050	5 488
16	24 060	7 545	23 000	2 420	5 510	23 450	3 604	2 440	5 333	19 790	15 190	4 823
17	27 160	6 697	18 690	2 232	5 134	19 870	4 605	1 920	6 357	16 350	16 840	4 083
18	27 740	6 067	16 690	2 051	4 970	16 430	5 214	2 245	17 000	14 170	21 210	3 473
19	27 250	5 406	18 070	2 153	5 890	14 170	5 170	3 894	25 770	18 210	21 560	3 051
20	25 490	4 817	19 740	1 625	6 798	12 070	6 160	8 177	47 890	17 920	23 140	5 487
21	24 510	4 448	27 730	1 533	7 612	9 635	8 904	7 883	40 200	16 100	25 020	5 752
22	24 420	4 697	35 800	1 594	7 274	8 105	14 070	6 976	35 170	13 940	27 030	5 141
23	22 030	4 087	37 790	1 603	8 489	6 742	15 230	5 871	33 120	12 160	39 760	4 859
24	20 000	3 711	43 100	4 155	11 980	5 903	13 480	4 883	42 590	11 400	41 070	4 100
25	17 950	3 407	47 650	4 009	13 320	4 975	11 720	4 051	46 160	10 900	36 110	3 881
26	15 820	3 263	42 880	3 977	12 410	4 152	10 170	3 590	51 980	10 690	37 770	3 664
27	14 170	3 435	36 760	3 328	11 950	3 373	8 945	3 149	61 480	12 110	50 880	3 375
28	12 410	4 178	30 680	4 080	11 610	2 829	7 587	2 803	60 770	13 900	47 720	3 389
29	10 820		25 730	5 851	10 580	2 315	6 483	2 509	55 860	16 730	40 620	3 593
30	9 454		21 320	7 336	9 610	2 042	5 576	2 268	51 120	17 380	37 050	5 840
31	8 220		17 660		8 486		4 891	1 929		18 140		10 280
Average	23 780	11 580	29 970	4 805	9 098	14 680	6 085	3 311	20 000	29 570	27 810	9 376
Lowest	8 220	3 263	5 833	1 533	4 970	2 042	1 857	1 731	1 237	10 690	13 160	3 051
Highest	55 360	33 090	62 310	14 760	13 320	32 100	15 230	8 177	61 480	67 890	50 880	31 160
Peak flow	57 550	35 050	65 440	16 270	13 860	32 970	16 440	8 679	64 540	71 120	52 460	35 210
Day of peak	3	3	11	1	25	14	23	20	27	10	27	1
Monthly total (million cu m)	63 68	28 02	80 27	12 45	24 36	38 06	16 30	8 87	51 84	79 19	72 08	25 11
Runoff (mm)	258	113	325	50	99	154	66	36	210	321	292	102
Rainfall (mm)	270	126	341	65	148	180	142	75	379	328	321	98

Statistics of monthly data for previous record (Jan 1939 to Dec 1980)

Mean flows	Avg	19 140	16 740	12 570	11 570	7 724	6 407	7 599	10 710	14 700	16 530	20 150	20 860
	Low	1 935	0 974	3 699	1 796	0 641	0 545	0 775	0 722	0 560	1 438	7 200	8 208
	(year)	1963	1963	1962	1974	1980	1978	1941	1955	1959	1972	1958	1963
	High	38 020	31 030	27 550	21 640	16 940	18 730	16 990	25 580	33 930	50 170	36 350	40 110
	(year)	1975	1945	1978	1949	1984	1972	1953	1962	1946	1967	1954	1954
Runoff	Avg	208	165	136	121	84	67	82	116	154	179	211	226
	Low	21	10	40	19	7	6	8	8	6	16	76	89
	High	412	304	299	227	184	197	184	277	356	544	381	435
Rainfall	Avg	225	144	162	112	119	124	136	161	213	207	234	236
(1984)	Low	67	20	73	12	29	73	81	31	29	91	127	90
(1980)	High	439	295	291	277	241	275	225	246	319	557	363	401

Summary statistics

Factors affecting flow regime

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	15 860	13 710	116
Lowest yearly mean		9 234	
Highest yearly mean		21 840	
Lowest monthly mean	3 311	0 545	1973
Highest monthly mean	29 970	50 170	1954
Lowest daily mean	1 237	0 108	1978
Highest daily mean	67 890	115 900	Oct 1967
Peak	71 120	10 Oct	7 Oct 1972
10 %ile	39 050	29 970	2 Dec 1954
50 %ile	10 600	10 190	
95 %ile	1 915	1 285	
Annual total (million cu m)	500 20	432 70	
Annual runoff (mm)	2025	1752	
Annual rainfall (mm)	2423	2073	
(1941-70 rainfall average (mm))		2189	

● Reservoir(s) in catchment.

Station description

Compound Crump weir supersedes the original station 073001 in 1970. All flow records from 1939 combined in single sequence.

076007 Eden at Sheepmount

1981

Measuring authority: NWWA
First year: 1967

Grid reference: NY 390571
Level stn: (m OD) 6.97

Catchment area (sq km): 2286.5
Max alt: (m OD) 950

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	99 660	34 180	27 560	44 340	40 570	27 770	14 820	15 350	9 736	296 900	83 550	105 900
2	207 100	166 100	74 440	41 160	29 140	48 610	14 320	14 460	9 513	455 400	134 300	78 540
3	167 400	247 300	54 160	36 690	49 900	41 700	14 840	13 740	9 403	189 200	72 560	66 980
4	98 660	103 400	36 800	34 840	63 610	29 840	14 320	13 420	9 273	160 300	70 300	96 550
5	74 340	74 290	31 450	31 150	36 510	39 870	13 730	12 940	9 256	128 600	53 510	69 880
6	70 080	71 350	52 300	29 070	31 330	35 610	15 780	12 620	9 488	98 040	45 560	57 030
7	61 060	60 720	220 600	27 710	30 370	46 780	16 260	12 870	9 361	123 900	40 290	51 750
8	75 060	55 610	208 500	26 360	30 910	83 320	15 190	14 270	9 158	195 400	36 250	43 660
9	84 990	47 590	96 670	25 230	30 060	77 070	14 250	15 330	9 265	464 400	33 170	36 280
10	58 920	42 980	214 800	23 600	33 920	55 320	13 690	13 850	9 398	225 500	36 550	31 950
11	50 400	38 610	165 900	23 520	29 500	111 800	14 710	12 590	11 160	128 500	95 720	28 260
12	56 010	36 380	120 000	28 740	26 840	65 770	14 610	11 770	12 790	94 890	56 840	27 200
13	51 810	35 590	83 100	29 160	23 930	90 340	13 960	12 040	11 990	74 800	42 850	29 270
14	157 900	32 540	73 720	23 790	22 150	83 710	13 080	12 250	11 480	62 130	37 090	27 390
15	75 650	30 660	59 750	21 270	21 100	48 790	12 630	12 300	16 180	52 800	34 060	24 710
16	60 000	29 200	50 110	19 890	21 270	38 930	18 630	11 830	15 280	46 120	35 150	22 300
17	147 300	27 600	44 560	18 900	24 680	32 830	30 900	10 960	13 820	40 970	53 660	20 770
18	92 360	26 120	44 920	18 250	20 880	29 700	28 080	10 980	22 720	37 480	120 400	22 670
19	100 900	24 740	60 340	17 440	20 100	28 440	19 960	15 760	51 860	43 220	79 930	40 800
20	73 210	24 220	85 420	17 030	23 000	26 830	32 030	34 530	156 800	41 560	111 300	46 840
21	113 100	23 430	139 900	16 590	36 730	23 470	43 890	20 540	77 040	36 070	77 000	43 660
22	105 900	22 900	247 900	16 030	27 900	21 310	87 490	15 880	54 860	32 440	70 020	28 840
23	81 960	21 400	212 700	16 030	25 680	19 910	71 900	13 650	66 420	29 910	368 000	25 100
24	70 590	20 590	209 700	19 680	30 370	19 250	42 550	12 500	129 800	30 710	139 000	22 930
25	58 760	19 860	240 100	24 910	31 010	18 210	30 780	11 860	97 490	35 930	95 160	20 920
26	66 650	19 800	155 500	31 680	32 020	17 350	26 520	11 410	224 500	33 820	193 400	19 760
27	58 140	19 090	103 400	36 000	55 480	16 490	23 300	10 990	194 800	57 300	246 200	19 530
28	49 100	22 380	86 750	63 320	48 800	15 790	21 000	10 630	151 600	63 050	149 300	19 410
29	44 340		66 450	80 470	33 740	15 080	19 230	10 440	112 500	80 390	106 900	44 250
30	40 640		56 250	64 660	28 750	14 670	17 510	10 240	138 800	56 510	169 800	73 450
31	36 600		48 940		26 360		16 300	9 909		51 610		118 700
Average	83 500	49 220	108 800	30 250	31 830	40 800	23 910	13 610	55 520	111 900	96 760	44 040
Lowest	36 600	19 090	27 560	16 030	20 100	14 670	12 630	9 909	9 156	29 910	33 170	19 410
Highest	207 100	247 300	247 900	80 470	63 610	111 800	82 490	34 530	274 500	464 400	368 000	118 700
Peak flow	238 300	463 500	362 800	91 380	91 030	155 800	121 000	45 300	598 500	630 600	543 100	145 100
Day of peak	2	2	23	29	4	11	22	20	26	2	23	31
Monthly total (million cu m)	223 70	119 10	291 30	78 41	85 24	105 80	64 03	36 45	143 90	298 60	249 50	118 00
Runoff (mm)	98	52	127	34	37	46	28	16	63	131	109	52
Rainfall (mm)	101	62	177	47	88	91	84	38	186	177	163	49

Statistics of monthly data for previous record (Oct 1967 to Dec 1977)

Mean flows	Avg	79 810	61 380	45 610	41 490	26 750	20 700	20 590	21 800	35 270	60 290	70 470	66 350
	Low	42 850	37 540	24 360	13 070	11 050	10 420	9 732	7 026	9 218	7 965	30 420	32 480
	(year)	1973	1973	1975	1974	1974	1973	1976	1976	1972	1972	1973	1971
	High	151 200	100 000	119 700	63 960	43 000	50 380	36 990	54 790	87 320	225 000	108 700	139 200
	(year)	1975	1974	1968	1970	1969	1972	1968	1971	1968	1967	1970	1974
Runoff	Avg	93	65	53	47	31	23	24	26	40	71	80	78
	Low	50	40	29	15	13	12	11	8	10	9	34	38
	High	177	106	140	73	50	57	43	64	99	264	123	163
Rainfall	Avg	125	76	86	61	65	74	80	95	102	102	134	113
(1968	Low	74	28	43	8	28	37	45	19	26	31	54	43
1980)	High	232	129	163	111	119	168	122	161	156	178	200	210

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	57 550	45 800	126
Lowest yearly mean		28 180	1973
Highest yearly mean		59 740	1968
Lowest monthly mean	13 610	7 026	Aug 1976
Highest monthly mean	111 900	225 000	Oct 1967
Lowest daily mean	9 156	5 468	7 Sep 1976
Highest daily mean	464 400	772 900	23 Mar 1968
Peak	630 600	1357 000	24 Mar 1968
10 %ile	128 100	93 690	137
50 %ile	35 780	29 070	123
95 %ile	11 290	9 366	121
Annual total (million cu m)	1815 00	1445 00	126
Annual runoff (mm)	794	632	126
Annual rainfall (mm)	1263	1113	113
[1941-70 rainfall average (mm)]		1240]	

Factors affecting flow regime

- Reservoir(s) in catchment.
- Abstraction for public water supplies

Station description

Velocity-area station

079006 Nith at Drumlanrig**1981**Measuring authority: SRPB
First year: 1967Grid reference: NX 858994
Level stn. (m OD) 52.20Catchment area (sq km): 471.0
Max alt (m OD): 725

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	50 350	25 420	13 090	9 677	1 202	5 344	4 250	2 351	1 443	138 200	69 750	27 610
2	207 600	61 900	19 040	8 215	1 169	21 260	4 070	2 190	1 414	153 900	40 600	18 670
3	92 330	54 980	8 386	6 964	1 138	8 035	4 011	4 399	1 388	66 600	48 250	20 880
4	34 970	27 930	6 091	6 002	1 460	18 450	3 950	4 847	1 383	34 580	27 860	29 780
5	23 590	30 490	5 589	5 352	2 561	14 540	3 844	2 934	1 587	26 050	16 970	15 620
6	24 530	30 830	44 260	5 075	2 955	12 150	3 624	2 415	1 597	18 020	12 680	13 580
7	25 730	32 110	120 200	4 580	5 561	16 170	3 155	2 198	1 495	29 670	10 330	12 330
8	28 320	20 870	49 850	4 417	13 490	38 950	2 940	2 047	1 439	53 900	8 789	8 631
9	23 200	13 550	21 440	3 998	8 880	35 450	2 950	1 895	1 399	96 220	7 956	8 593
10	13 940	10 300	45 290	3 901	10 500	17 450	2 201	1 787	1 922	57 850	18 070	11 310
11	12 930	8 795	25 570	3 892	5 151	23 630	5 423	1 756	4 619	41 690	32 640	12 680
12	18 790	27 750	19 050	3 878	4 019	12 090	2 888	1 746	2 597	30 610	14 420	12 640
13	33 870	16 660	13 930	3 857	4 285	34 050	2 305	1 903	1 927	21 090	11 660	14 780
14	107 200	10 160	11 190	3 254	3 553	22 900	2 102	1 849	2 019	16 460	11 380	16 440
15	30 150	8 736	12 740	1 926	3 284	12 200	1 979	1 701	6 881	12 540	32 670	15 740
16	19 460	7 438	8 732	1 474	4 241	10 440	2 147	1 618	4 345	11 910	24 980	19 590
17	38 880	6 509	7 604	1 440	4 451	8 377	9 863	1 613	33 420	9 757	22 210	23 820
18	45 610	5 897	11 920	1 335	5 027	6 876	5 485	2 680	40 630	19 700	19 500	24 540
19	35 190	5 152	14 720	1 269	13 700	6 600	3 660	9 824	66 380	27 750	30 390	21 990
20	25 420	4 964	20 640	1 220	6 063	5 660	4 983	8 551	79 950	15 180	53 170	20 170
21	87 690	63 080	43 920	1 202	5 176	4 688	14 450	3 860	25 320	10 770	33 110	18 850
22	41 360	51 610	19 410	1 169	4 015	4 250	46 170	2 774	19 990	8 707	27 840	15 650
23	25 440	22 840	25 810	1 138	13 940	4 070	16 240	2 747	95 390	7 883	106 000	13 400
24	21 540	16 860	43 420	1 460	11 990	4 011	7 617	1 989	45 410	8 201	32 330	12 370
25	19 820	13 110	45 160	2 561	6 958	3 950	5 643	1 926	24 830	8 811	31 590	11 140
26	22 090	10 930	26 900	2 955	10 570	3 844	5 952	1 868	85 630	8 620	73 720	11 510
27	16 010	9 315	22 100	5 561	8 339	3 624	4 651	1 721	93 130	9 597	75 300	9 719
28	12 650	8 351	90 230	13 490	7 049	3 155	4 009	1 635	60 200	12 010	49 050	8 932
29	10 890	28 900	8 880	8 880	5 468	2 940	3 799	1 564	32 260	22 530	35 850	9 807
30	9 392	16 560	10 500	4 552	2 950	3 050	3 050	1 527	25 240	41 810	80 340	26 290
31	8 222	12 000		5 911		2 602	2 602	1 473		35 820		33 540
Average	37 650	21 660	27 520	4 355	6 021	12 270	6 129	2 674	25 510	34 080	35 300	16 790
Lowest	8 222	4 964	5 589	1 138	1 138	2 940	1 979	1 473	1 383	7 883	7 956	8 593
Highest	207 600	63 080	120 200	13 490	13 940	38 950	46 170	9 824	95 390	153 900	106 000	33 540
Peak flow	276 900	157 900	234 800	20 350	21 600	69 930	61 910	23 560	279 000	366 000	253 500	80 170
Day of peak	2	2	7	28	19	8	21	19	19	1	23	30
Monthly total (million cu m)	100 80	57 40	73 72	11 29	16 13	31 80	16 42	7 16	66 12	91 28	91 49	44 98
Runoff (mm)	214	111	157	24	34	68	35	15	140	194	194	96
Rainfall (mm)	186	96	191	40	108	118	96	43	241	234	223	69

Statistics of monthly data for previous record (Jun 1967 to Dec 1980)

Mean	Avg	27 010	19 490	16 240	9 884	7 461	4 918	5 011	6 257	12 720	19 870	26 040	23 010
flows	Low	14 220	9 269	4 428	2 457	1 389	1 879	1 511	1 074	1 261	2 745	14 890	12 770
	(year)	1980	1979	1969	1974	1980	1978	1976	1976	1972	1972	1967	1971
	High	61 220	30 930	33 190	24 190	16 030	14 660	10 360	21 010	24 820	39 200	39 790	41 980
	(year)	1974	1970	1978	1972	1968	1972	1970	1980	1980	1967	1977	1974
Runoff	Avg	154	101	92	54	42	27	28	36	70	113	143	131
	Low	81	48	25	14	8	10	9	6	7	16	82	73
	High	348	159	189	133	91	81	59	119	137	223	219	239
Rainfall	Avg	175	113	115	74	96	84	95	94	144	162	174	150
	Low	87	32	34	11	19	52	55	23	20	68	94	77
	High	398	170	217	175	213	163	144	179	215	301	252	282

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	19 140	14 810	129
Lowest yearly mean		10 720	1971
Highest yearly mean		18 380	1977
Lowest monthly mean	2 674	1 074	Aug 1976
Highest monthly mean	37 650	61 220	Jan 1974
Lowest daily mean	1 138	0 746	28 Aug 1976
Highest daily mean	207 600	227 800	30 Jan 1974
Peak	366 000	449 200	30 Oct 1977
10 %ile	44 990	37 540	120
50 %ile	10 890	7 611	143
95 %ile	1 472	1 344	110
Annual total (million cu m)	603 60	467 40	129
Annual runoff (mm)	1282	997	129
Annual rainfall (mm)	1645	1476	111
[1941-70 rainfall average (mm)]		1584	

Factors affecting flow regime

- Reservoir(s) in catchment
- Abstraction for public water supplies

Station description
Velocity-area station

084005 Clyde at Blairston

1981

Measuring authority CRPB
First year 1958
Grid reference NS 704579
Level stn (m OD) 17.60
Catchment area (sq km) 1704.2
Max alt (m OD) 732

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	96 020	26 750	19 780	33 170	15 980	11 970	10 330	11 650	9 725	160 000	150 500	78 120
2	352 500	130 300	57 130	28 760	13 450	20 500	11 350	11 270	9 948	455 700	148 100	60 530
3	208 100	163 000	37 150	25 210	26 860	25 080	10 770	12 220	9 648	196 000	114 300	61 350
4	93 780	79 980	23 180	22 810	29 170	24 850	10 320	14 310	10 700	98 660	98 790	78 800
5	67 240	56 070	23 650	21 080	17 580	33 000	10 980	13 090	17 100	69 730	60 970	57 170
6	64 040	71 480	119 400	19 720	15 210	21 930	13 350	11 600	12 670	51 700	48 990	49 060
7	67 020	103 900	235 000	18 470	17 670	25 100	12 430	11 140	11 350	58 410	40 760	47 180
8	90 830	67 980	177 400	18 010	16 910	76 670	11 050	11 030	10 980	99 340	34 280	32 690
9	87 780	43 920	79 930	17 110	15 530	92 290	10 000	10 720	10 530	200 800	30 980	22 320
10	54 780	36 970	177 200	16 090	14 830	50 260	10 150	10 570	11 390	117 200	51 310	17 790
11	48 250	31 370	101 700	15 640	14 800	58 160	18 020	10 540	11 680	73 110	98 910	16 450
12	61 930	33 220	68 880	16 510	13 670	42 550	20 070	10 390	12 870	51 660	56 750	16 870
13	52 400	33 970	53 560	15 440	14 540	101 500	12 860	10 690	11 350	47 080	40 010	19 740
14	171 000	27 430	46 410	13 680	13 030	109 400	10 620	10 720	14 350	40 330	33 430	20 250
15	74 810	25 180	46 630	13 100	11 810	49 910	9 812	10 290	20 840	33 900	43 380	17 560
16	54 030	23 250	35 610	12 770	13 420	35 410	9 524	10 160	17 260	29 970	61 920	14 760
17	83 230	21 170	28 650	12 500	14 540	28 350	11 330	10 530	37 010	27 460	68 470	11 430
18	97 240	20 060	30 680	11 920	12 410	24 150	12 010	10 830	73 900	32 090	69 640	10 860
19	97 920	18 780	31 860	12 030	12 450	22 670	10 770	16 780	74 480	59 150	87 470	14 700
20	63 760	18 610	42 790	11 790	14 260	20 380	10 240	24 420	199 900	40 420	135 900	20 330
21	136 300	17 880	61 110	11 570	12 620	17 220	11 890	16 580	77 340	28 610	98 980	21 480
22	105 800	16 880	59 150	11 700	11 810	15 810	50 040	12 690	44 670	23 430	87 140	17 370
23	71 730	15 860	63 590	11 180	11 540	14 090	57 060	11 530	151 800	21 440	154 400	14 140
24	62 460	15 010	96 590	12 930	14 880	13 470	25 570	11 050	159 000	27 880	88 160	13 840
25	55 630	14 370	124 400	14 070	15 220	12 710	17 010	10 690	63 280	21 570	70 390	11 860
26	58 690	14 700	88 070	16 990	14 140	11 840	14 610	10 490	206 400	20 400	137 300	13 820
27	52 360	14 040	57 810	16 700	17 720	11 710	13 170	10 340	252 300	48 440	188 400	13 640
28	42 450	16 930	87 430	19 670	19 230	10 850	12 760	10 050	150 100	56 610	108 800	13 370
29	37 610	79 380	21 860	17 270	10 420	10 420	11 900	10 020	81 050	138 600	93 310	15 300
30	33 020	51 730	18 650	13 960	10 240	10 500	9 763	56 960	144 000	150 200	43 800	
31	28 480	39 800		13 690			9 675	9 893	100 700		74 280	
Average	86 200	41 390	72 430	17 020	15 490	33 400	15 170	11 810	61 020	82 870	88 380	29 540
Lowest	28 480	14 040	19 780	11 180	11 540	10 240	9 524	9 763	9 648	20 400	30 980	10 860
Highest	352 500	163 000	235 000	33 170	29 170	109 400	57 060	24 420	252 300	455 700	188 400	78 800
Peak flow	461 600	259 000	263 400	36 910	37 520	172 100	69 070	28 640	362 000	525 000	248 100	108 900
Day of peak	2	3	8	1	4	14	23	20	27	2	2	1
Monthly total (million cu m)	230.90	100.10	194.00	44.12	41.49	86.57	40.62	31.63	158.20	222.00	229.10	79.13
Runoff (mm)	135	59	114	26	24	51	24	19	93	130	134	46
Rainfall (mm)	115	59	140	22	67	97	78	29	189	173	156	44

Statistics of monthly data for previous record (Oct 1958 to Dec 1980)

Mean flows	Avg	59 410	49 280	41 520	30 480	23 720	16 700	14 960	23 800	34 190	46 980	62 860	62 570
	Low	11 920	8 855	14 810	10 430	8 832	8 127	8 361	7 654	7 627	8 246	26 620	26 080
	(year)	1963	1963	1969	1974	1980	1961	1976	1976	1972	1972	1958	1963
	High	134 300	80 580	88 940	58 700	51 980	41 190	29 700	57 520	74 550	114 600	119 300	115 100
	(year)	1975	1962	1979	1972	1967	1972	1965	1962	1967	1967	1979	1974
Runoff	Avg	93	71	65	46	37	25	24	37	52	74	96	98
	Low	19	13	23	16	14	12	13	12	12	13	40	41
	High	211	114	140	89	82	63	47	90	113	180	181	181
Rainfall	Avg	107	75	72	68	77	74	85	97	106	110	118	117
	Low	25	23	28	9	23	43	39	24	16	33	43	38
	High	237	127	137	125	127	157	125	201	196	231	221	209

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre 1981
Mean flow (m ³ s ⁻¹)	46 230	38 820	119
Lowest yearly mean		27 090	1973
Highest yearly mean		49 550	1979
Lowest monthly mean	11 810	7 627	Sep 1972
Highest monthly mean	88 380	134 300	Jan 1975
Lowest daily mean	9 524	4 502	11 Oct 1959
Highest daily mean	455 700	643 700	31 Oct 1977
Peak	525 000	762 600	31 Oct 1977
10 %ile	102 900	88 510	116
50 %ile	73 080	22 850	101
95 %ile	10 330	8 125	127
Annual total (million cu m)	1458.00	1225.00	119
Annual runoff (mm)	855	719	119
Annual rainfall (mm)	1169	1101	106
[1941-70 rainfall average (mm)]		1151]	

Factors affecting flow regime

Station description
Velocity-area station

085003 Falloch at Glen Falloch**1981**Measuring authority: CRPB
First year: 1970Grid reference: NN 321197
Level sin. (m OD) 9.50Catchment area (sq km) 80.3
Max alt. (m OD) 1130**Daily mean gauged discharges (cubic metres per second)**

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	34 640	9 774	2 168	1 059	0 300	1 712	1 118	0 399	0 251	9 176	35 010	2 604
2	52 780	13 950	1 968	0 929	0 587	3 965	1 512	0 345	0 275	9 880	11 660	2 437
3	10 010	6 211	0 896	0 750	2 578	9 027	0 876	0 629	0 272	10 370	26 760	9 711
4	2 688	2 689	0 699	0 638	1 094	9 369	1 112	0 419	21 020	2 958	4 739	3 727
5	3 404	18 750	0 680	0 582	0 651	5 376	10 090	0 416	3 550	2 148	2 163	2 140
6	2 601	21 450	4 918	0 558	1 390	9 932	11 750	0 374	1 260	4 040	1 673	1 637
7	8 077	69 150	68 890	0 578	9 807	8 194	6 788	0 773	0 829	3 664	1 340	0 989
8	16 820	4 598	11 080	0 551	3 170	11 790	2 613	0 260	1 029	9 567	1 303	0 626
9	4 010	2 333	3 787	0 471	1 236	4 588	1 585	0 244	5 534	13 950	15 100	0 477
10	1 844	1 553	20 570	0 435	0 953	2 163	2 133	0 245	26 990	12 130	30 110	0 378
11	4 790	5 328	15 380	0 995	0 643	1 691	5 910	1 064	3 854	4 214	5 537	0 299
12	2 360	19 500	4 501	0 708	0 790	8 689	2 425	1 373	1 488	2 739	2 580	0 375
13	37 080	4 003	2 148	0 498	1 166	18 050	1 347	0 829	1 008	1 798	2 490	0 463
14	11 710	2 298	1 557	0 390	0 987	4 557	1 068	0 580	2 551	1 387	3 465	0 484
15	1 944	4 736	1 279	0 339	0 770	3 560	2 839	0 966	2 215	1 784	12 420	0 449
16	1 484	1 859	1 013	0 307	2 878	2 601	2 738	0 515	7 920	2 571	13 410	0 419
17	1 838	1 442	2 064	0 268	2 321	1 604	1 764	1 994	27 390	1 439	17 010	0 445
18	5 020	1 159	2 743	0 241	4 071	1 315	1 097	2 027	10 630	21 190	6 713	0 445
19	2 773	0 976	2 930	0 276	5 368	1 149	1 913	12 790	19 550	4 680	31 270	0 861
20	3 015	0 836	3 291	0 216	3 569	0 787	1 298	1 663	32 790	2 182	18 730	1 802
21	23 800	0 722	2 614	0 197	1 963	0 575	2 663	1 276	24 010	1 674	35 960	0 954
22	12 340	0 723	1 611	0 170	3 288	0 492	4 465	0 755	5 694	1 344	15 330	0 643
23	11 280	0 610	1 685	0 157	13 500	0 458	1 632	0 595	31 460	1 836	5 381	0 569
24	4 627	0 555	20 790	0 198	5 647	0 387	0 933	1 545	6 935	1 577	2 670	0 509
25	2 958	0 556	23 260	0 190	1 668	0 319	1 107	1 364	3 382	1 276	35 030	0 528
26	7 601	0 476	4 840	0 175	2 206	0 274	1 071	0 760	44 260	5 838	24 870	0 584
27	3 215	0 644	14 580	0 157	1 425	0 241	0 791	0 519	24 340	13 320	9 878	0 550
28	2 775	1 798	29 110	0 232	1 373	0 228	2 825	0 433	8 020	16 600	3 492	0 518
29	8 111	3 090	3 090	0 809	1 047	0 278	1 241	0 370	3 865	16 810	12 300	0 852
30	3 949	7 710	0 546	0 813	0 412	0 726	0 318	13 950	7 800	9 034	4 096	4 096
31	3 019	1 290		5 803		0 514	0 276		6 548		3 844	
Average	9 257	7 078	8 279	0 452	2 678	3 797	2 577	1 144	11 210	6 336	13 230	1 416
Lowest	1 484	0 476	0 680	0 157	0 300	0 228	0 514	0 244	0 225	1 276	1 303	0 299
Highest	52 780	69 150	68 890	1 059	13 500	18 050	11 750	12 790	44 260	21 190	35 960	9 711
Peak flow	117 600	153 000	124 900	1 361	35 730	43 910	36 490	39 020	133 400	70 840	160 300	21 480
Day of peak	2	7	8	30	8	13	5	19	10	18	20	3
Monthly total (million cu m)	24 79	17 12	22 17	1 17	7 77	9 63	6 90	3 06	29 05	16 97	34 29	1 79
Runoff (mm)	309	213	276	15	89	122	86	39	362	211	427	37
Rainfall (mm)	320	220	301	25	176	177	165	74	457	315	496	111

Statistics of monthly data for previous record (Oct 1970 to Dec 1980—complete or missing months total 0.3 years)

Mean	Avg	8 920	5 197	5 482	3 066	2 718	2 741	2 536	3 174	6 074	6 366	8 917	7 507
Lowest	Low	3 698	1 840	0 854	0 408	0 133	0 328	1 246	0 492	0 751	1 362	5 679	2 436
	(year)	1980	1975	1975	1974	1980	1977	1977	1976	1972	1974	1975	1976
	High	19 630	8 139	11 360	6 325	6 422	5 609	3 495	5 149	11 080	11 530	13 830	15 650
	(year)	1974	1974	1979	1977	1976	1973	1980	1978	1980	1971	1978	1974
Runoff	Avg	298	158	183	99	91	89	85	106	196	212	288	250
	Low	123	55	28	13	4	11	42	16	24	45	181	81
	High	655	245	379	204	214	181	117	172	358	385	446	527
Rainfall	Avg	376	217	188	141	148	162	178	160	262	278	343	329
	Low	172	136	100	15	20	67	111	42	40	100	257	162
	High	715	282	358	261	288	249	329	254	453	475	419	637

Summary statistics**Factors affecting flow regime**

	for 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	5 592	5 225	107
Lowest yearly mean		4 440	1972
Highest yearly mean		6 144	1974
Lowest monthly mean	0 452	0 133	May 1980
Highest monthly mean	13 230	19 630	Jan 1974
Lowest daily mean	0 157	23 Apr	12 Jun 1977
Highest daily mean	69 150	7 Feb	2 Mar 1979
Peak	160 300	20 Nov	22 Oct 1971
10 %ile	16 240		14 370
50 %ile	1 961		1 955
95 %ile	0 268		0 214
Annual total (million cu m)	176 30	164 90	107
Annual runoff (mm)	2196	2054	107
Annual rainfall (mm)	2837	2782	102
[1941-70 rainfall average (mm)]		2732	

Station description

Velocity-area station. Artificial low flow control from 1975

201005 Camowen at Camowen Terrace

1981

Measuring authority DOEN
First year 1972
Grid reference IH 460730
Level stn (m OD) 66 00
Catchment area (sq km). 274 6
Max alt (m OD) 539

Daily mean gauged discharges (cubic metres per second)

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	6 400	2 793	9 098	3 474	1 635	3 042	1 155	0 947	0 657	4 299	17 830	9 646
2	12 140	38 250	4 927	3 143	1 341	14 860	1 204	0 921	0 663	14 940	7 978	5 523
3	7 261	19 050	3 134	2 889	2 639	7 003	1 223	1 675	0 854	20 850	12 100	4 318
4	4 849	11 670	2 605	2 675	2 947	4 599	1 117	1 301	1 434	7 977	6 552	4 799
5	6 099	7 167	29 530	2 391	2 058	3 642	1 151	1 106	1 487	4 559	4 462	4 011
6	11 290	5 223	14 380	2 249	2 641	4 822	1 152	1 063	1 940	3 805	3 763	4 607
7	5 835	4 903	14 320	2 077	11 380	9 176	1 102	0 982	0 818	3 463	3 280	9 425
8	6 738	4 147	7 438	2 178	5 278	24 100	1 116	0 995	0 827	22 830	2 940	4 866
9	6 743	3 398	5 734	2 131	2 244	6 287	1 091	1 008	0 777	22 350	2 650	3 663
10	5 124	2 994	15 780	2 037	1 873	3 964	1 048	0 958	2 913	13 720	2 684	3 012
11	4 803	2 695	6 604	2 276	1 646	5 440	1 061	0 922	1 756	7 995	3 381	2 545
12	7 889	2 885	4 640	2 474	1 441	3 303	1 032	0 863	1 793	5 276	2 881	2 421
13	34 390	2 743	13 400	2 077	19 350	2 859	0 994	0 877	1 720	4 003	2 437	9 620
14	27 300	2 332	6 798	1 892	15 520	2 547	0 963	0 845	22 830	3 317	2 263	12 230
15	9 689	2 184	4 280	1 758	3 975	2 189	0 827	0 848	5 805	2 765	2 552	6 278
16	42 170	1 939	4 337	1 679	17 010	1 957	0 969	0 844	2 755	2 449	2 647	4 557
17	36 870	1 803	3 741	1 631	5 076	1 932	0 995	0 838	29 710	2 239	2 384	7 099
18	20 830	1 660	17 730	1 592	7 087	2 154	1 133	0 894	10 560	2 187	2 528	5 996
19	12 150	1 531	39 610	1 557	6 335	2 432	1 856	1 309	10 570	2 725	3 523	33 020
20	13 530	1 477	18 290	1 483	10 790	1 960	1 917	1 314	7 813	3 240	7 283	19 420
21	10 620	1 671	18 290	1 427	11 920	1 758	7 492	1 215	3 949	4 625	5 999	7 662
22	6 913	2 092	6 155	1 178	4 341	1 641	6 648	1 555	3 162	3 332	6 053	5 494
23	5 468	2 026	9 486	1 286	7 369	1 600	2 292	1 296	35 530	3 740	14 090	3 666
24	5 130	1 924	22 540	1 779	6 028	1 559	1 520	1 101	12 190	5 647	5 274	2 924
25	7 222	7 401	43 130	1 608	4 070	1 462	1 465	0 994	6 429	6 084	4 208	2 648
26	6 715	4 288	13 010	1 404	2 966	1 385	1 381	0 779	20 430	5 862	10 680	27 830
27	4 616	3 072	7 618	1 253	5 581	1 340	1 132	0 725	18 980	10 810	13 040	36 720
28	3 923	3 408	8 028	1 259	3 542	1 319	1 212	0 706	7 047	9 654	9 547	9 135
29	4 010	7 132	1 132	1 270	2 530	1 282	1 103	0 722	7 363	16 750	8 886	13 190
30	3 381	4 903	1 881	1 881	2 370	1 308	1 005	0 686	6 238	9 654	16 730	10 430
31	3 009	4 000			3 990		0 976	0 671		6 836		6 960
Average	10 910	5 240	11 960	1 932	5 707	4 097	1 585	0 999	7 627	7 677	6 354	9 152
Lowest	3 009	1 477	2 605	1 178	1 341	1 282	0 827	0 671	0 654	2 187	2 263	2 421
Highest	42 170	38 250	43 130	3 474	19 350	24 100	7 492	1 675	35 530	22 830	17 830	36 720

Peak flow												
Day of peak												
Monthly total (million cu m)	29 21	12 68	32 03	5 01	15 29	10 62	4 25	2 67	19 77	20 56	16 47	24 51
Runoff (mm)	106	46	117	18	56	39	15	10	72	75	60	89
Rainfall (mm)	142	76	145	30	142	79	77	42	177	133	90	90

Statistics of monthly data for previous record (May 1972 to Dec 1980)

Mean flows	Avg	13 270	9 626	6 756	4 049	3 527	2 195	2 142	2 869	4 936	6 429	9 641	12 010
	Low	8 859	3 320	2 504	1 693	0 751	1 053	0 985	1 336	0 873	1 197	5 458	5 295
	(year)	1979	1979	1973	1980	1980	1974	1979	1975	1972	1972	1980	1975
	High	18 070	20 480	13 200	6 779	7 954	5 051	4 698	5 551	9 655	12 990	17 540	22 470
	(year)	1978	1977	1978	1977	1972	1972	1972	1979	1978	1976	1979	1978
Runoff	Avg	129	85	56	38	34	21	21	28	47	63	91	117
	Low	86	29	24	16	7	10	9	13	8	12	52	52
	High	176	180	129	64	78	48	46	54	91	127	166	219
Rainfall	Avg	124	83	94	59	74	62	77	87	102	97	121	123
	Low	83	34	38	21	20	28	45	20	13	55	78	39
	High	163	161	142	100	144	96	102	147	159	171	182	179

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	6 122	6 445	95
Lowest yearly mean		4 319	1975
Highest yearly mean		8 710	1978
Lowest monthly mean	0 999	0 751	May 1980
Highest monthly mean	11 980	22 470	Dec 1978
Lowest daily mean	0 654	0 582	23 May 1980
Highest daily mean	43 130	123 300	19 Dec 1973
Peak			
10 %ile	14 520	14 280	102
50 %ile	3 393	3 636	93
95 %ile	0 870	1 057	82
Annual total (million cu m)	193 10	203 40	95
Annual runoff (mm)	703	741	95
Annual rainfall (mm)	1223	1103	111
[1941-70 rainfall average (mm)]		920]	

Factors affecting flow regime

- Abstraction for public water supplies
- Augmentation from effluent returns

Station description

Velocity-area station with cableway, weir control

205005 Ravernet at Ravernet**1981**Measuring authority: DOEN
First year: 1972Grid reference: IJ 267613
Level stn. (m OD) 31.00Catchment area (sq km): 69.5
Max alt. (m OD) 163**Daily mean gauged discharges (cubic metres per second)**

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	2 274	1 802	4 202	2 750	1 638	2 024	0 943	0 887	0 592	7 699	2 048	3 273
2	2 524	2 921	3 256	2 409	1 547	3 712	1 011	0 849	0 585	18 640	2 016	2 941
3	2 377	3 413	2 776	2 225	1 814	2 700	0 956	1 018	0 567	14 480	2 171	2 661
4	2 203	3 739	2 521	2 065	2 389	2 827	0 901	0 945	0 550	9 736	2 124	2 464
5	2 128	3 072	4 290	1 917	2 362	2 414	0 886	1 041	0 571	6 850	1 914	2 306
6	2 124	2 742	4 026	1 802	2 337	3 323	0 890	0 975	0 560	5 368	1 811	2 220
7	2 098	2 507	4 354	1 689	3 535	3 834	0 870	0 893	0 555	4 727	1 715	2 490
8	2 107	2 319	3 695	1 590	3 087	8 842	0 831	0 859	0 550	4 636	1 633	2 279
9	2 105	2 149	3 341	1 425	2 516	5 283	0 802	0 825	0 537	5 313	1 558	2 067
10	2 029	1 997	3 827	1 397	3 270	4 005	0 790	0 773	0 608	4 476	1 522	1 922
11	1 991	1 914	3 444	1 481	2 852	4 065	0 786	0 761	0 629	3 751	1 519	1 851
12	1 979	1 848	3 042	1 597	2 512	3 225	0 762	0 757	0 573	3 271	1 484	2 404
13	3 641	1 697	2 735	1 460	8 889	2 857	0 746	0 769	0 555	2 894	1 414	6 362
14	3 686	1 630	2 546	1 374	6 516	2 575	0 741	0 753	0 653	2 592	1 362	4 885
15	3 144	1 539	2 367	1 295	4 180	2 303	0 737	0 739	0 704	2 245	1 341	4 142
16	4 039	1 455	2 182	1 275	5 464	2 083	0 826	0 720	0 648	2 054	1 347	3 471
17	3 897	1 388	2 036	1 211	4 006	1 913	0 813	0 709	0 982	1 887	1 330	2 965
18	4 020	1 323	2 632	1 143	4 470	1 868	0 790	0 697	1 229	1 739	1 267	2 583
19	3 684	1 235	2 472	1 091	4 298	1 797	0 788	0 763	1 640	1 695	1 194	3 056
20	3 482	1 196	4 301	1 055	4 415	1 664	0 798	0 786	1 808	1 641	1 258	4 770
21	3 489	1 721	3 811	1 036	3 645	1 562	1 321	0 761	1 346	1 630	1 312	4 762
22	3 039	2 550	3 170	1 008	3 326	1 483	1 811	0 754	1 189	1 631	2 014	4 021
23	2 760	3 800	3 243	1 037	3 235	1 401	1 379	0 748	1 442	1 590	9 102	3 441
24	2 528	2 731	3 466	3 065	2 903	1 331	1 201	0 730	1 615	1 575	3 972	3 021
25	2 454	2 528	3 603	2 762	2 584	1 243	1 139	0 722	1 566	1 521	3 399	2 768
26	2 425	2 275	3 095	2 221	2 381	1 193	1 090	0 702	9 624	1 475	3 584	4 357
27	2 273	2 671	5 026	1 989	2 249	1 158	1 026	0 645	9 043	1 472	3 781	6 957
28	2 143	2 967	5 512	1 872	2 026	1 115	1 009	0 638	4 712	1 435	3 907	5 302
29	2 103	4 048	1 745	1 908	1 908	1 033	0 972	0 633	4 256	1 346	3 791	7 176
30	1 987	3 471	1 738	1 871	1 871	0 978	0 943	0 625	4 083	1 333	3 672	6 004
31	1 892	3 070		2 104	2 104		0 921	0 600		1 366		4 783
Average	2 665	2 255	3 566	1 691	3 234	2 527	0 951	0 777	1 799	3 938	2 352	3 668
Lowest	1 892	1 196	2 036	1 008	1 547	0 978	0 737	0 600	0 532	1 333	1 194	1 851
Highest	4 039	3 739	7 472	3 065	8 889	8 842	1 811	1 041	9 624	18 640	9 102	7 176
Peak flow	5 016	5 135	12 010	4 392	19 190	16 440	2 357	1 163	15 400	21 490	16 340	9 918
Day of peak	13	27	19	24	14	8	22	5	27	2	23	13
Monthly total (million cu m)	7 14	5 45	9 55	4 38	8 66	6 55	2 55	2 08	4 66	10 55	6 10	9 82
Runoff (mm)	103	78	137	63	125	94	37	30	67	152	88	141
Rainfall (mm)	57	63	114	41	156	94	62	50	136	98	76	98

Statistics of monthly data for previous record (Aug 1972 to Dec 1980—incomplete or missing months total 0.9 years)

Mean flows	Avg	2 944	1 980	1 171	0 737	0 470	0 216	0 101	0 147	0 644	1 831	1 651	3 001
	Low	1 978	1 092	0 334	0 221	0 085	0 043	0 022	0 009	0 086	0 319	0 947	0 585
	(year)	1976	1975	1973	1974	1980	1975	1976	1972	1978	1975	1975	1975
	High	4 196	3 664	2 066	2 461	1 022	0 546	0 344	0 369	2 379	4 799	3 277	11 690
	(year)	1974	1977	1980	1979	1979	1980	1980	1972	1974	1976	1979	1978
Runoff	Avg	113	70	45	27	18	8	4	6	24	71	67	116
	Low	76	38	13	8	3	2	1	0	3	12	35	23
	High	162	128	80	92	39	20	13	14	89	185	127	450
Rainfall	Avg	106	59	64	44	62	53	61	63	88	92	80	96
	Low	81	21	21	11	21	22	34	14	9	31	44	22
	High	154	108	112	97	90	105	85	95	160	207	123	268

Summary statistics

	For 1981	For record preceding 1981	1981 As % of pre-1981
Mean flow (m ³ s ⁻¹)	2 457	1 240	198
Lowest yearly mean		0 763	1975
Highest yearly mean		1 749	1978
Lowest monthly mean	0 777	0 009	Aug 1976
Highest monthly mean	3 938	11 690	Dec 1978
Lowest daily mean	0 532	0 001	31 Aug 1976
Highest daily mean	18 640	57 820	28 Dec 1978
Peak	21 490		
10 %ile	4 299	2 845	151
50 %ile	2 017	0 594	339
95 %ile	0 652	0 026	2538
Annual total (million cu m)	77 48	39 14	198
Annual runoff (mm)	1115	563	198
Annual rainfall (mm)	1045	868	120
[1941-70 rainfall average (mm)]			

Factors affecting flow regime

● Flow reduced by industrial and/or agricultural abstractions

Station description

Velocity-area station Flat V weir from 1976 Crest level is 31 535 m O D

Part (ii) – the monthly flow data

The introductory information (measuring authority etc) is as described in Part (i).

Hydrometric statistics for the year

The monthly average, peak flow, runoff and rainfall figures are equivalent to the summary information following the daily mean gauged discharges in Part (i). Because of the rounding of monthly runoff values the runoff for the year may differ slightly from the sum of the individual monthly totals.

Monthly and yearly statistics for previous record

Monthly mean flows (Average, Low and High) and the monthly rainfall and runoff figures are equivalent to those presented in Part (i). Again, due to the rounding of monthly runoff values, the average runoff for the year derived from the previous record may differ slightly from the sum of the individual monthly totals. The peak flow is the highest archived discharge in cubic metres per second for each month. For many stations the archived series of monthly instantaneous maximum flows, from which the preceding record peak is abstracted, is incomplete, particularly for the earlier years, and certain of the peak flows are known to be of limited accuracy. An examination of the quality of the peak flow figures is underway and significant revision may be expected as this review proceeds.

The figures are published primarily to provide a guide to the range of river flows experienced throughout the year at the featured gauging stations.

Factors affecting flow regime

Code letters are used as described in Part (i)

Station type

The station type is coded by the list of abbreviations given below: two abbreviations may be applied to each station relating to the measurement of lower or higher flows.

B	Broad-crested weir
C	Crump (triangular profile) single crest weir
CB	Compound broad-crested weir. The compounding may include a mixture of types such as rectangular and triangular profiles, flumes and flat Vs and with or without divide walls
CC	Compound Crump weir
EM	Electromagnetic gauging station
EW	Essex weir (simple Crump weir modified with angled, sloping, triangular profileflank-ing crests) in trapezoidal channel
FL	Flume
FV	Flat V triangular profile weir
MIS	Miscellaneous method
TP	Rectangular thin-plate weir
US	Ultrasonic gauging station
VA	Velocity-area gauging station
VN	Triangular (V notch) thin-plate weir

004001 Canon at Moy Bridge

1981

Measuring authority: HRPB Grid reference: NH 482547 Catchment area (sq km) 961.8
First year: 1953 Level stn. (m OD) 10 03 Max alt. (m OD) 1052

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	123 100	94 430	58 760	23 050	14 800	25 920	19 250	20 890	46 810	93 980	118 700	74 340	59 461
(m ³ s ⁻¹)	Peak	409 60	320 90	153 60	126 60	68 24	174 90	67 93	63 56	223 70	249 90	411 80	226 40	411 80
Runoff (mm)		343	238	164	62	41	70	54	58	126	262	319	207	1942
Rainfall (mm)		316	152	157	43	60	106	79	58	278	353	405	81	2088

Monthly and yearly statistics for previous record (Oct 1953 to Dec 1980—incomplete or missing months total 5 6 years)

Mean	Avg	57 950	53 120	55 810	42 060	34 260	22 310	21 080	25 790	37 240	52 080	61 290	69 870	44 380
Flows	Low	31 690	25 810	28 520	13 940	12 210	8 861	9 527	8 162	12 510	27 560	24 090	27 970	29 991
(m ³ s ⁻¹)	High	135 100	121 000	127 900	75 730	53 050	47 560	36 700	45 140	71 360	94 030	121 700	165 100	58 616
Peak flow (m ³ s ⁻¹)		342 60	467 20	362 90	203 90	232 20	165 20	247 40	254 90	174 20	324 80	348 30	1076 00	1076 00
Runoff (mm)		161	135	155	113	95	60	59	72	100	145	165	195	1456
Rainfall (mm)		173	127	138	109	108	107	108	123	151	198	211	228	1776

Factors affecting flow regime: H 1981 runoff is 133% of previous mean
Station type: VA rainfall 118%

007002 Findhorn at Forres

1981

Measuring authority: HRPB Grid reference: NJ 018583 Catchment area (sq km) 781 9
First year: 1958 Level stn. (m OD) 9 60 Max alt. (m OD) 941

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	49 360	17 280	20 420	5 583	6 005	9 271	10 940	3 827	24 620	49 540	31 760	14 740	20 279
(m ³ s ⁻¹)	Peak	361 10	144 10	149 70	11 26	24 96	156 00	129 70	16 92	861 10	512 00	237 00	135 60	861 10
Runoff (mm)		169	53	70	19	21	31	37	13	82	170	105	51	820
Rainfall (mm)		132	55	79	24	50	83	86	34	170	223	165	40	1141

Monthly and yearly statistics for previous record (Oct 1958 to Dec 1980)

Mean	Avg	21 910	19 890	22 130	21 620	15 790	10 070	10 170	14 540	13 420	18 860	23 100	24 530	17 998
Flows	Low	9 429	5 259	8 615	5 560	3 836	3 321	2 750	2 478	2 863	3 547	9 701	8 332	11 894
(m ³ s ⁻¹)	High	38 180	44 700	54 320	54 170	41 990	41 900	24 650	58 840	37 870	43 130	39 710	61 550	25 482
Peak flow (m ³ s ⁻¹)		340 40	537 70	410 00	173 50	294 30	430 20	469 10	2410 00	308 00	377 60	465 20	616 90	2410 00
Runoff (mm)		75	62	76	72	54	33	35	50	44	65	77	84	726
Rainfall (mm)		96	64	80	67	73	78	89	106	90	103	115	103	1064

Factors affecting flow regime: N 1981 runoff is 113% of previous mean
Station type: VA rainfall 107%

009002 Deveron at Muireisk

1981

Measuring authority: NERP Grid reference: NJ 705498 Catchment area (sq km) 954 9
First year: 1960 Level stn. (m OD) 25 30 Max alt. (m OD) 775

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	41 720	15 350	19 270	8 879	5 894	6 511	6 034	3 737	5 147	37 920	17 510	23 740	15 976
(m ³ s ⁻¹)	Peak	138 10	27 49	51 03	13 57	10 06	50 69	38 14	5 02	75 91	233 30	119 30	192 10	233 30
Runoff (mm)		117	39	54	24	17	18	17	10	14	106	48	67	530
Rainfall (mm)		101	36	71	22	32	83	72	26	103	183	97	76	902

Monthly and yearly statistics for previous record (Oct 1960 to Dec 1980)

Mean	Avg	24 710	20 510	20 000	17 360	14 200	8 340	8 120	11 800	10 890	16 570	21 850	24 170	16 534
Flows	Low	5 726	5 376	6 735	7 460	5 373	3 535	2 738	2 578	2 907	2 706	7 375	5 184	8 890
(m ³ s ⁻¹)	High	45 260	38 800	37 190	37 990	46 250	21 770	18 950	36 380	36 540	49 480	43 710	46 390	22 792
Peak flow (m ³ s ⁻¹)		214 50	135 20	187 10	131 30	506 60	254 40	272 50	472 90	372 60	332 10	305 60	244 20	506 60
Runoff (mm)		69	57	56	47	40	23	23	33	30	46	59	68	546
Rainfall (mm)		82	58	66	64	71	61	78	95	76	88	99	84	922

Factors affecting flow regime: N 1981 runoff is 97% of previous mean
Station type: VA rainfall 98%

010002 Ugie at Inverugie

1981

Measuring authority: NERP Grid reference: NK 101485 Catchment area (sq km) 325 0
First year: 1971 Level stn. (m OD) 8 50 Max alt. (m OD) 734

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	10 880	4 461	6 001	2 941	2 150	2 170	1 523	1 319	2 264	7 345	6 927	9 321	4 775
(m ³ s ⁻¹)	Peak	25 97	7 00	21 02	4 14	2 75	7 07	1 95	1 48	13 56	28 24	22 54	46 64	46 64
Runoff (mm)		90	33	49	23	18	17	13	11	18	61	55	77	465
Rainfall (mm)		72	33	81	24	32	84	46	23	104	130	110	91	830

Monthly and yearly statistics for previous record (Feb 1971 to Dec 1980)

Mean	Avg	7 632	6 955	5 237	3 649	2 842	1 832	1 658	1 810	1 983	3 917	6 301	8 549	4 355
Flows	Low	2 285	1 999	1 593	1 245	1 542	0 913	0 903	0 764	0 791	0 869	1 942	1 473	3 003
(m ³ s ⁻¹)	High	11 160	14 370	9 291	6 516	5 662	2 824	4 274	3 795	3 940	8 075	10 390	13 280	6 122
Peak flow (m ³ s ⁻¹)		61 04	83 56	67 86	30 50	27 50	7 40	23 79	17 91	38 80	87 72	44 77	77 00	87 72
Runoff (mm)		63	52	43	29	23	15	14	15	16	32	50	70	423
Rainfall (mm)		83	44	64	48	49	50	59	64	82	81	90	80	794

Factors affecting flow regime: 1981 runoff is 110% of previous mean
Station type: VA rainfall 105%

011001 Don at Parkhill

1981

Measuring authority NERPB Grid reference NJ 887141 Catchment area (sq km) 1273.0
First year: 1969 Level stn. (m OD) 32.44 Max alt. (m OD) 872

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	41 690	22 460	29 180	14 340	9 558	10 110	9 298	6 357	11 510	34 850	18 390	27 950	19 641
	Peak	78 17	39 04	62 09	21 36	15 22	49 43	26 06	8 20	105 40	144 60	57 69	135 50	144 60
Runoff (mm)		88	43	61	29	20	21	20	13	23	73	37	59	488
Rainfall (mm)		91	38	78	20	42	72	70	24	126	144	88	86	879

Monthly and yearly statistics for previous record (Dec 1969 to Dec 1980)

Mean	Avg	30 060	29 980	27 260	25 120	17 160	11 380	10 580	13 010	10 650	18 810	20 860	29 780	20 349
flows	Low	9 453	6 846	6 587	9 317	9 672	6 773	4 335	3 346	4 194	3 631	7 018	7 951	10 822
	High	46 270	52 550	48 180	47 220	33 850	20 130	21 340	42 320	18 160	60 580	35 260	57 440	27 663
Peak flow (m ³ s ⁻¹)		185 90	165 10	159 80	132 30	110 70	45 46	119 30	251 20	121 20	347 20	158 50	198 30	347 20
Runoff (mm)		63	58	57	51	36	23	22	27	22	40	47	63	505
Rainfall (mm)		102	62	70	67	66	56	73	77	66	78	85	81	883

Factors affecting flow regime: Station type: VA 1981 runoff is 97% of previous mean rainfall 100%

013007 North Esk at Logie Mill

1981

Measuring authority TRPB Grid reference NO 699640 Catchment area (sq km) 730.0
First year: 1976 Level stn. (m OD) 10.60 Max alt. (m OD) 939

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	16 790	9 794	36 290	9 072	7 236	7 566	5 242	3 350	21 660	27 580	17 700	20 790	15 266
	Peak													
Runoff (mm)		62	32	133	32	27	27	19	12	77	101	63	76	662
Rainfall (mm)														

Monthly and yearly statistics for previous record (Jan 1976 to Dec 1980)

Mean	Avg	21 450	33 820	34 180	25 680	16 810	7 853	6 243	11 490	8 599	27 810	22 400	36 480	21 026
flows	Low	13 770	16 900	22 030	18 290	6 179	5 579	3 718	2 548	4 748	5 691	17 770	21 350	18 326
	High	28 700	45 670	42 750	32 180	23 450	8 731	9 362	24 250	11 130	61 640	32 140	59 880	23 088
Peak flow (m ³ s ⁻¹)														
Runoff (mm)		79	114	125	91	62	28	23	42	31	102	80	134	909
Rainfall (mm)														

Factors affecting flow regime: NS P 1 Station type: CC 1981 runoff is 73% of previous mean

014001 Eden at Kemback

1981

Measuring authority TRPB Grid reference NO 415158 Catchment area (sq km) 307.4
First year: 1967 Level stn. (m OD) 6.20 Max alt. (m OD) 522

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	4 106	3 390	7 104	2 722	2 103	1 757	1 231	1 135	3 166	6 011	3 599	4 737	3 422
	Peak	8 34	13 22	18 73	4 29	3 18	3 88	1 73	1 28	29 73	32 23	10 22	31 71	32 23
Runoff (mm)		36	27	62	23	18	15	11	10	27	52	30	41	352
Rainfall (mm)		30	44	100	21	71	55	48	16	156	96	68	63	768

Monthly and yearly statistics for previous record (Oct 1967 to Dec 1980)

Mean	Avg	6 273	6 900	4 596	3 412	3 084	1 943	1 409	1 548	1 490	2 616	4 290	5 189	3 546
flows	Low	2 546	2 170	1 408	1 199	1 406	1 077	0 914	0 799	0 749	0 833	0 830	1 731	1 446
	High	9 578	19 460	8 096	6 480	8 335	3 807	2 076	2 983	2 983	6 880	8 500	10 730	5 176
Peak flow (m ³ s ⁻¹)		43 03	71 31	38 34	28 27	47 48	11 55	8 00	15 53	8 76	35 97	39 37	43 27	71 31
Runoff (mm)		55	55	40	29	27	16	12	13	13	23	36	45	364
Rainfall (mm)		82	62	55	43	68	49	60	60	62	70	73	68	752

Factors affecting flow regime: NS GE1 Station type: VA 1981 runoff is 97% of previous mean rainfall 102%

016003 Ruchill Water at Cultybraggan

1981

Measuring authority TRPB Grid reference NN 764204 Catchment area (sq km) 99.5
First year: 1970 Level stn. (m OD) 62.29 Max alt. (m OD) 985

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	4 719	3 732	8 884	1 045	2 628	3 216	2 103	0 358	10 260	6 521	8 346	1 630	4 454
	Peak	35 79	23 89	165 30	2 75	31 21	39 28	30 12	0 67	227 30	68 15	146 50	7 03	227 30
Runoff (mm)		127	91	239	27	71	84	57	10	267	176	217	44	1409
Rainfall (mm)		140	122	240	24	174	106	119	24	393	228	222	111	1903

Monthly and yearly statistics for previous record (Oct 1970 to Dec 1980)

Mean	Avg	7 295	5 976	5 691	2 821	2 620	1 661	1 706	2 244	3 822	4 810	7 356	6 712	4 386
flows	Low	3 442	3 283	1 802	0 758	0 304	0 402	0 512	0 405	0 345	0 789	3 827	2 978	3 281
	High	14 770	7 938	11 100	4 690	7 075	4 069	2 800	4 512	7 720	10 230	11 360	11 660	5 102
Peak flow (m ³ s ⁻¹)		250 40	130 20	116 70	61 27	185 00	221 30	160 00	85 89	108 20	123 00	183 30	136 30	260 40
Runoff (mm)		196	147	153	73	71	43	46	60	100	129	192	181	1392
Rainfall (mm)		236	164	160	91	110	99	125	130	174	178	252	221	1940

Factors affecting flow regime: N Station type: VA 1981 runoff is 101% of previous mean rainfall 98%

016004 Earn at Forteviot Bridge**1981**Measuring authority: TRPB
First year: 1972Grid reference: NO 043184
Level stn. (m OD) 7.84Catchment area (sq km): 782.2
Max alt. (m OD): 985

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	32 990	23 220	44 930	11 470	12 480	13 370	10 510	3 664	36 710	42 370	46 180	19 960	24 821
(m ³ s ⁻¹)	Peak	65 23	54.96	187 10	34 47	28 29	40 40	25.50	9.21	271.80	153 90	155 20	49.36	271.80
Runoff (mm)		113	72	154	38	43	44	36	13	122	145	153	68	1000
Rainfall (mm)		88	85	182	18	120	83	90	14	279	185	171	84	1399

Monthly and yearly statistics for previous record (Oct 1972 to Dec 1980)

Mean	Avg	42 980	38 620	33 650	18 970	12 420	18 817	6 866	8 911	16 670	23 390	38 790	42 140	24 283
flows	Low	25 000	16 070	12 310	8 389	4 906	4 095	4 089	3 709	6 938	5 984	15 120	15 060	15 508
(m ³ s ⁻¹)	High	85 510	58 640	55 640	28 960	26 630	16 450	11 050	16 530	31 080	54 740	62 930	64 550	28 512
Peak flow (m ³ s ⁻¹)		275 90	214 60	175 00	104 50	155 20	114 90	65.62	95 24	129 50	235 90	328 60	219 80	328 60
Runoff (mm)		147	121	115	63	43	29	24	31	55	80	129	144	980
Rainfall (mm)		163	108	129	55	71	68	90	97	137	121	169	157	1365

Factors affecting flow regime: P H
Station type: VA1981 runoff is 102% of previous mean
rainfall 102%**017002 Leven at Leven****1981**Measuring authority: FRPB
First year: 1970Grid reference: NO 369006
Level stn. (m OD) 4.05Catchment area (sq km): 424.0
Max alt. (m OD): 522

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	10 560	7 837	11 240	3 869	2 756	2 943	1 907	1 681	4 651	10 580	9 662	7 982	6 308
(m ³ s ⁻¹)	Peak	18 74	24 59	30 42	7.99	4 53	5 70	4 50	2.96	25 39	33 27	33 27	21 49	33 27
Runoff (mm)		67	45	71	24	17	18	12	11	28	67	59	50	469
Rainfall (mm)		51	51	123	20	72	73	57	15	175	123	111	51	922

Monthly and yearly statistics for previous record (Aug 1969 to Dec 1980)

Mean	Avg	9 066	9 880	6 306	4 339	3 028	2 373	1 414	2 579	2 624	4 598	7 233	9 542	5 228
flows	Low	4 781	2 882	1 543	1 413	2 012	1 166	0 902	0 822	0 970	0 795	0 972	3 462	2 269
(m ³ s ⁻¹)	High	15 310	22 660	11 200	8 835	5 414	4 467	2 123	4 841	5 616	11 000	14 570	19 200	7 605
Peak flow (m ³ s ⁻¹)		34 99	128 00	36 54	26 41	12 60	12 31	5 34	24 71	14 25	40 00	39 76	62 69	128 00
Runoff (mm)		57	57	40	27	19	15	9	16	16	29	44	60	389
Rainfall (mm)		86	57	56	42	64	60	65	63	71	69	89	75	797

Factors affecting flow regime: R E1
Station type: VA1981 runoff is 121% of previous mean
rainfall 116%**017005 Avon at Polmonthill****1981**Measuring authority: FRPB
First year: 1972Grid reference: NS 952797
Level stn. (m OD) 4.27Catchment area (sq km): 195.3
Max alt. (m OD): 312

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	4 375	4 005	6 568	1 134	0 975	2 252	1 069	0 559	5 576	8 100	9 494	2 764	3 908
(m ³ s ⁻¹)	Peak	18 97	40 02	50 99	2 60	1 61	19 86	12 37	0 88	49 09	76 75	31 57	15 18	76 75
Runoff (mm)		60	50	90	15	13	30	15	8	74	111	126	38	829
Rainfall (mm)		69	58	128	20	61	86	69	19	191	157	137	43	1038

Monthly and yearly statistics for previous record (Oct 1971 to Dec 1980)

Mean	Avg	5 962	4 485	4 032	2 598	1 639	1 196	0 741	1 049	2 037	3 188	5 474	5 837	3 181
flows	Low	3 566	2 347	1 665	0 962	0 739	0 649	0 667	0 541	0 619	0 670	1 370	2 300	2 080
(m ³ s ⁻¹)	High	10 610	8 321	8 493	4 945	2 481	2 884	0 920	1 986	4 693	6 552	9 193	10 120	4 301
Peak flow (m ³ s ⁻¹)		60 83	41 80	50 33	31 63	23 56	18 93	3 12	12 47	34 87	68 95	57 74	58 82	86 95
Runoff (mm)		82	56	55	34	22	16	10	14	27	44	73	80	514
Rainfall (mm)		102	59	63	47	63	54	64	67	73	79	95	101	867

Factors affecting flow regime: E1
Station type: VA1981 runoff is 122% of previous mean
rainfall 120%**018003 Teith at Bridge of Teith****1981**Measuring authority: FRPB
First year: 1957Grid reference: NN 725011
Level stn. (m OD) 14.70Catchment area (sq km): 518.0
Max alt. (m OD): 1165

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	34 790	27 450	36 850	6 614	10 130	13 200	8 307	4 107	32 190	30 050	51 960	11 790	22 287
(m ³ s ⁻¹)	Peak	116 20	96 02	151 30	23 09	25 95	39 51	34 00	7 55	160 90	96 02	138 10	43 72	160 90
Runoff (mm)		180	128	191	33	52	66	43	21	161	155	260	61	1362
Rainfall (mm)		197	146	244	17	156	112	110	28	360	268	301	93	2032

Monthly and yearly statistics for previous record (Oct 1963 to Dec 1980—Incomplete or missing months total 0.1 years)

Mean	Avg	32 590	25 850	24 400	14 760	15 040	10 620	9 019	10 510	18 330	25 300	31 720	30 130	20 670
flows	Low	14 360	12 880	6 813	5 612	4 017	3 953	4 371	3 659	3 635	5 897	14 890	11 890	15 094
(m ³ s ⁻¹)	High	72 430	41 340	60 190	25 030	33 160	21 520	15 900	18 460	37 940	66 410	58 090	62 450	26 491
Peak flow (m ³ s ⁻¹)		246 50	207 40	176 00	89 21	158 00	161 70	74 22	88 35	184 10	210 90	245 10	241 10	246 50
Runoff (mm)		169	122	126	74	78	53	47	54	92	131	159	158	1269
Rainfall (mm)		232	140	129	93	136	120	111	114	173	195	198	194	1836

Factors affecting flow regime: S P
Station type: VA1981 runoff is 107% of previous mean
rainfall 111%

018005 Allan Water at Bridge of Allan

1981

Measuring authority FRPB Grid reference: NS 786980 Catchment area (sq km): 210.0
First year: 1972 Level sin. (m OD): 11.20 Max alt. (m OD): 633

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	8 043	5 272	10 740	2 446	2 476	4 335	1 868	0 935	9 113	10 810	12 690	5 693	6 198
	Peak	32 65	29 25	70 98	5 59	9 98	20 39	10 56	1 31	84 13	72 45	51 71	18 02	84 13
Runoff (mm)		103	60	137	30	32	54	24	12	112	138	157	73	930
Rainfall (mm)		89	69	164	16	98	89	79	13	247	176	154	67	1261

Monthly and yearly statistics for previous record (Jul 1971 to Dec 1980)

Mean	Avg	9 832	8 571	7 476	4 260	3 253	2 401	1 748	2 450	3 886	5 563	8 707	9 409	5 616
Flows	Low	6 471	4 793	3 152	1 654	1 189	0 945	1 057	0 679	0 907	0 971	3 642	3 709	4 270
	High	16 410	12 960	12 370	6 618	6 827	5 423	2 320	5 921	8 466	9 961	13 560	14 060	6 887
Peak flow (m ³ s ⁻¹)		98 20	67 84	60 68	32 65	72 11	55 39	44 65	55 83	54 76	79 68	97 89	88 27	98 20
Runoff (mm)		125	100	95	53	41	30	22	31	48	71	107	120	644
Rainfall (mm)		153	92	82	53	85	74	81	69	102	99	120	133	1143

Factors affecting flow regime: N 1 1981 runoff is 110% of previous mean
Station type: VA rainfall: 110%

020001 Tyne at East Linton

1981

Measuring authority FRPB Grid reference: NT 591768 Catchment area (sq km): 307.0
First year: 1961 Level sin. (m OD): 16.50 Max alt. (m OD): 528

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	2 523	2 381	5 245	1 597	1 128	1 037	0 868	0 579	0 928	6 470	3 162	3 584	2 459
	Peak	9 90	25 67	30 18	2 63	1 91	3 43	4 58	1 31	9 00	82 71	20 45	26 08	82 71
Runoff (mm)		72	19	46	13	10	9	8	5	8	56	27	31	253
Rainfall (mm)		26	34	87	21	48	51	59	17	93	141	70	54	701

Monthly and yearly statistics for previous record (Jan 1961 to Dec 1980)

Mean	Avg	4 427	3 993	3 844	2 529	2 274	1 342	1 240	1 734	1 731	2 066	3 644	3 617	2 698
Flows	Low	1 032	0 783	0 531	0 644	0 926	0 586	0 500	0 468	0 461	0 451	0 524	0 582	0 709
	High	9 778	8 624	8 789	6 158	7 733	3 861	4 393	9 855	6 711	7 000	11 210	8 405	4 146
Peak flow (m ³ s ⁻¹)		59 83	39 39	66 17	33 39	67 07	37 13	70 18	112 70	73 34	66 17	64 81	52 02	112 70
Runoff (mm)		39	32	34	21	20	11	11	15	15	18	31	32	277
Rainfall (mm)		64	44	51	44	57	51	60	83	69	66	73	50	712

Factors affecting flow regime: Station type: VA 1981 runoff is 91% of previous mean
rainfall: 98%

021006 Tweed at Boleside

1981

Measuring authority TWRP Grid reference: NT 498334 Catchment area (sq km): 1500.0
First year: 1961 Level sin. (m OD): 94.50 Max alt. (m OD): 839

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	46 830	28 450	66 880	20 020	21 030	32 830	18 810	8 542	35 490	65 720	57 550	30 310	36 039
	Peak	120 10	157 30	337 70	60 88	49 62	117 50	112 80	14 57	318 50	467 20	295 20	89 09	467 20
Runoff (mm)		84	46	119	35	38	57	34	15	61	117	99	54	759
Rainfall (mm)		72	58	160	36	95	97	100	26	179	172	141	70	1206

Monthly and yearly statistics for previous record (Oct 1961 to Dec 1980)

Mean	Avg	52 090	43 640	41 720	29 920	24 630	15 350	13 200	20 970	29 810	38 720	49 060	50 900	34 131
Flows	Low	14 300	10 480	14 930	9 896	7 605	7 413	6 900	5 017	4 572	4 435	14 400	22 450	18 578
	High	110 700	70 010	101 000	57 330	64 330	28 920	31 960	44 750	63 090	96 720	119 800	86 540	43 314
Peak flow (m ³ s ⁻¹)		606 00	483 90	470 10	248 90	182 80	126 00	342 60	444 30	385 10	1019 00	486 30	390 70	1019 00
Runoff (mm)		93	71	74	52	44	27	24	37	52	69	85	91	718
Rainfall (mm)		119	84	91	72	86	77	84	108	119	114	123	112	1189

Factors affecting flow regime: S P 1981 runoff is 106% of previous mean
Station type: VA rainfall: 101%

021012 Teviot at Hawick

1981

Measuring authority TWRP Grid reference: NT 522159 Catchment area (sq km): 323.0
First year: 1963 Level sin. (m OD): 90.10 Max alt. (m OD): 608

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	8 973	6 854	17 090	4 348	5 050	10 500	4 386	1 578	8 247	18 430	12 960	5 906	8 694
	Peak	27 26	97 75	107 10	18 59	32 57	74 79	76 10	2 55	117 90	156 50	137 20	26 69	156 50
Runoff (mm)		74	51	142	35	42	84	36	13	66	153	104	49	850
Rainfall (mm)		55	60	156	40	114	107	114	21	189	171	134	66	1227

Monthly and yearly statistics for previous record (Oct 1963 to Dec 1980)

Mean	Avg	12 610	10 350	8 890	5 853	5 573	3 798	2 772	4 250	6 214	9 101	12 300	12 580	7 848
Flows	Low	6 981	4 234	2 991	2 189	1 319	1 099	0 964	0 992	0 915	0 816	2 627	4 527	4 183
	High	28 560	18 510	20 250	10 750	17 340	7 877	8 163	9 075	13 770	25 690	29 930	21 980	10 546
Peak flow (m ³ s ⁻¹)		185 90	228 60	124 10	86 03	98 31	81 84	99 33	178 60	185 60	273 40	188 60	195 50	273 40
Runoff (mm)		105	78	74	47	46	30	23	35	50	75	99	104	767
Rainfall (mm)		109	77	93	66	88	79	80	102	106	107	123	113	1143

Factors affecting flow regime: N 1981 runoff is 111% of previous mean
Station type: VA rainfall: 107%

021018 Lyne Water at Lyne Station**1981**Measuring authority: TWRP
First year: 1968Grid reference: NT 209401
Level stn. (m OD) 168.00Catchment area (sq km) 175.0
Max alt. (m OD) 562

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	5 047	3 111	5 058	1 708	1 219	1 833	1 222	0 811	1 383	5 684	5 783	3 152	3 000
(m ³ s ⁻¹)	Peak	13 43	16 23	21 48	2 85	3 19	10 72	5 67	1 11	11 34	30 49	18 60	9 63	30 49
Runoff (mm)		77	43	78	25	19	27	19	12	20	87	85	48	541
Rainfall (mm)		66	47	118	18	60	87	73	23	126	149	126	44	932

Monthly and yearly statistics for previous record (Oct 1968 to Dec 1980)

Mean	Avg	4 417	4 100	3 386	2 545	1 713	1 298	0 960	1 135	1 570	2 457	4 030	4 095	2 634
Flows	Low	1 682	2 158	1 357	1 127	0 882	0 787	0 724	0 605	0 591	0 597	0 977	1 618	1 428
(m ³ s ⁻¹)	High	8 774	5 713	7 325	5 028	3 377	2 373	1 624	2 448	3 139	4 414	6 813	8 374	3 548
Peak flow (m ³ s ⁻¹)		24 68	28 83	27 65	21 48	17 36	15 58	11 90	11 63	18 68	40 49	36 35	30 56	40 49
Runoff (mm)		68	57	52	38	26	19	15	17	23	38	60	63	475
Rainfall (mm)		85	59	73	53	63	60	64	72	90	82	99	81	881

Factors affecting flow regime: S P
Station type: VA1981 runoff is 114% of previous mean
rainfall 106%**021022 Whiteadder Water at Hutton Castle****1981**Measuring authority: TWRP
First year: 1969Grid reference: NT 881550
Level stn. (m OD) 29.00Catchment area (sq km) 503.0
Max alt. (m OD) 533

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	6 164	4 672	12 450	4 319	3 347	3 100	2 466	1 451	3 115	13 670	6 039	6 406	5 600
(m ³ s ⁻¹)	Peak	42 47	75 18	64 13	9 63	8 56	13 44	25 70	2 46	42 47	190 00	39 44	36 00	190 00
Runoff (mm)		33	22	66	27	18	16	13	8	16	73	31	34	353
Rainfall (mm)		37	30	103	34	60	56	68	21	103	136	70	84	802

Monthly and yearly statistics for previous record (Sep 1969 to Dec 1980)

Mean	Avg	10 730	11 550	9 569	6 291	4 497	3 049	1 856	2 494	2 156	4 169	6 562	8 341	5 912
Flows	Low	2 143	1 557	1 108	1 375	2 132	1 403	1 315	1 162	0 990	1 001	1 100	1 347	1 828
(m ³ s ⁻¹)	High	21 100	27 300	19 220	14 980	9 213	7 921	2 486	6 714	4 322	16 670	13 570	20 660	8 494
Peak flow (m ³ s ⁻¹)		177 30	160 90	133 90	54 80	82 30	64 13	24 35	79 00	43 20	97 00	186 00	108 10	186 00
Runoff (mm)		57	58	51	37	24	16	10	13	11	22	34	44	371
Rainfall (mm)		82	60	70	46	62	54	55	69	59	66	70	69	762

Factors affecting flow regime: S P
Station type: CC1981 runoff is 95% of previous mean
rainfall 105%**022006 Blyth at Hartford Bridge****1981**Measuring authority: NWA
First year: 1966Grid reference: NZ 243800
Level stn. (m OD) 24 60Catchment area (sq km) 269 4
Max alt. (m OD) 259

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	2 627	2 001	11 090	2 862	1 078	0 489	0 417	0 175	0 536	3 158	2 217	4 122	2 560
(m ³ s ⁻¹)	Peak	10 11	15 74	150 20	23 29	2 44	2 21	4 31	0 24	7 75	14 83	23 89	37 69	150 20
Runoff (mm)		26	18	110	28	10	5	4	2	5	31	21	41	302
Rainfall (mm)		36	43	140	65	53	41	68	15	110	96	66	63	796

Monthly and yearly statistics for previous record (Oct 1966 to Dec 1980—incomplete or missing months total 0 3 years)

Mean	Avg	4 413	4 160	3 604	1 715	1 477	0 627	0 384	0 591	0 747	1 751	2 514	3 721	2 135
Flows	Low	0 587	0 398	0 245	0 359	0 325	0 177	0 108	0 067	0 107	0 111	0 162	0 274	0 537
(m ³ s ⁻¹)	High	9 475	7 997	9 756	2 956	4 948	1 871	1 242	2 543	2 695	9 680	5 673	12 500	3 410
Peak flow (m ³ s ⁻¹)		110 70	59 52	108 40	33 00	38 86	22 60	7 60	39 61	30 02	56 84	69 20	122 30	122 30
Runoff (mm)		44	38	36	17	15	6	4	6	7	17	24	37	260
Rainfall (mm)		64	50	59	39	61	52	55	70	61	61	65	62	699

Factors affecting flow regime: E
Station type: FV1981 runoff is 121% of previous mean
rainfall 114%**023001 Tyne at Bywell****1981**Measuring authority: NWA
First year: 1956Grid reference: NZ 038617
Level stn. (m OD) 14 00Catchment area (sq km) 2175 6
Max alt. (m OD) 893

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	57 080	35 350	98 300	29 620	20 320	27 610	17 810	9 015	30 600	71 440	78 380	44 340	43 322
(m ³ s ⁻¹)	Peak	251 90	922 10	592 30	239 00	109 50	314 50	234 40	38 99	522 50	875 10	982 90	191 50	982 90
Runoff (mm)		70	39	121	35	25	33	22	11	36	88	93	55	629
Rainfall (mm)		70	57	173	65	76	83	85	29	142	141	125	59	1105

Monthly and yearly statistics for previous record (Oct 1956 to Dec 1980—incomplete or missing months total 0 2 years)

Mean	Avg	68 750	58 570	54 130	38 040	25 810	17 730	18 370	29 910	34 830	45 350	62 230	67 030	43 338
Flows	Low	19 270	14 360	20 150	8 461	7 246	4 910	5 199	3 403	4 155	4 727	18 090	23 080	25 848
(m ³ s ⁻¹)	High	103 900	98 140	150 900	75 670	58 610	50 010	46 230	58 070	99 450	147 200	147 000	112 000	63 834
Peak flow (m ³ s ⁻¹)		1130 00	918 00	1472 00	852 30	476 30	440 30	758 90	1282 00	1189 00	1586 00	1382 00	1317 00	1586 00
Runoff (mm)		85	66	67	45	32	21	23	37	41	56	74	83	629
Rainfall (mm)		98	73	78	63	69	68	82	99	90	90	103	100	1013

Factors affecting flow regime: S
Station type: VA1981 runoff is 100% of previous mean
rainfall 109%

023007 Derwent at Rowlands Gill

1981

Measuring authority: NWA
First year: 1963

Grid reference: NZ 168581
Level stn. (m OD) 29.30

Catchment area (sq km) 242.1
Max alt. (m OD) 560

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	2 249	1 923	6 610	2 728	1 670	1 064	0 976	0 833	1 051	2 419	1 381	1 996	2 075
(m ³ s ⁻¹)	Peak	4 50	9 79	27 98	17 65	3 73	2 39	2 55	1 17	5 82	25 23	9 34	14 92	27 98
Runoff (mm)		25	19	73	29	18	11	11	9	11	27	15	22	271
Rainfall (mm)		43	46	127	65	52	35	55	22	120	122	73	70	830

Monthly and yearly statistics for previous record (Nov 1962 to Dec 1980—incomplete or missing months total 0.1 years)

Mean	Avg	3 637	4 070	4 999	3 160	2 307	1 620	1 430	1 733	1 867	2 213	3 311	3 376	2 804
flows	Low	1 148	0 911	0 749	1 258	1 050	0 844	0 796	0 658	0 626	0 791	0 903	0 882	1 119
(m ³ s ⁻¹)	High	7 320	10 490	13 570	6 561	5 051	3 348	4 087	4 667	7 264	8 971	11 780	7 826	5 673
Peak flow (m ³ s ⁻¹)		38 18	34 48	93 73	32 73	33 80	37 15	19 10	60 69	36 41	58 87	97 98	63 02	97 98
Runoff (mm)		40	41	55	34	28	17	16	19	20	24	35	37	366
Rainfall (mm)		81	85	73	58	65	63	62	87	73	64	88	76	855

Factors affecting flow regime: P
Station type: CC

1981 runoff is 74% of previous mean
rainfall 97%

024004 Bedburn Beck at Bedburn

1981

Measuring authority: NWA
First year: 1959

Grid reference: NZ 118322
Level stn. (m OD) 109.00

Catchment area (sq km) 74.9
Max alt. (m OD) 531

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1 313	1 013	3 453	1 607	0 998	0 531	0 288	0 189	0 598	2 501	1 237	1 006	1 228
(m ³ s ⁻¹)	Peak	6 03	15 82	16 98	18 86	3 00	2 36	0 64	0 38	1 55	37 82	17 28	5 61	37 82
Runoff (mm)		47	33	123	58	36	18	10	7	21	89	43	36	619
Rainfall (mm)		45	62	133	76	68	43	43	25	152	142	84	86	969

Monthly and yearly statistics for previous record (Oct 1959 to Dec 1980—incomplete or missing months total 0.2 years)

Mean	Avg	2 027	1 811	1 829	1 298	0 914	0 543	0 439	0 582	0 606	1 137	1 510	1 777	1 204
flows	Low	0 515	0 472	0 436	0 518	0 289	0 196	0 177	0 120	0 157	0 146	0 245	0 444	0 667
(m ³ s ⁻¹)	High	3 419	4 011	5 128	2 750	2 117	1 524	1 056	1 465	1 790	4 348	3 722	4 488	1 633
Peak flow (m ³ s ⁻¹)		23 82	21 59	38 51	35 09	20 62	21 68	21 92	22 99	32 30	38 08	34 26	42 93	42 93
Runoff (mm)		72	59	65	45	33	19	16	21	21	41	52	64	507
Rainfall (mm)		88	67	71	58	65	58	67	81	69	75	90	84	873

Factors affecting flow regime: N
Station type: CC

1981 runoff is 102% of previous mean
rainfall 110%

024009 Wear at Chester le Street

1981

Measuring authority: NWA
First year: 1977

Grid reference: NZ 283512
Level stn. (m OD) 5.50

Catchment area (sq km) 1008.3
Max alt. (m OD) 747

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	15 780	11 360	37 020	14 900	8 858	5 874	4 586	3 338	7 485	26 170	15 870	13 230	13 706
(m ³ s ⁻¹)	Peak	65 31	183 80	161 30	106 20	21 62	27 86	20 58	6 96	92 94	273 40	192 80	112 90	273 40
Runoff (mm)		42	27	98	38	24	15	12	9	19	70	41	35	430
Rainfall (mm)		52	52	126	63	65	43	56	31	137	129	87	72	913

Monthly and yearly statistics for previous record (Sep 1977 to Dec 1980)

Mean	Avg	21 430	29 590	36 250	16 500	11 040	8 559	5 969	7 248	4 961	7 481	16 290	32 110	16 407
flows	Low	18 060	20 270	19 150	9 605	4 732	3 945	3 780	5 007	3 777	4 834	8 885	21 490	14 968
(m ³ s ⁻¹)	High	23 570	37 620	64 200	30 120	17 530	13 410	9 731	9 201	6 193	13 350	20 300	50 640	19 785
Peak flow (m ³ s ⁻¹)		175 70	212 70	349 60	94 71	100 70	131 10	82 95	59 19	29 38	55 26	190 80	353 10	353 10
Runoff (mm)		57	72	96	42	29	22	16	19	13	20	42	85	514
Rainfall (mm)		75	74	109	15	32	161	57	103	44	100	91	69	930

Factors affecting flow regime: G
Station type: FV

1981 runoff is 84% of previous mean
rainfall 98%

025006 Greta at Rutherford Bridge

1981

Measuring authority: NWA
First year: 1960

Grid reference: NZ 034122
Level stn. (m OD) 223.00

Catchment area (sq km) 86.1
Max alt. (m OD) 596

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	3 405	1 562	6 530	1 957	1 021	1 243	0 290	0 185	2 628	5 443	4 057	1 257	2 466
(m ³ s ⁻¹)	Peak	23 38	48 68	48 68	37 68	6 80	35 29	1 96	1 08	50 13	93 85	47 04	22 14	93 85
Runoff (mm)		106	44	203	59	32	37	9	6	79	169	122	39	905
Rainfall (mm)		84	70	195	88	81	71	44	43	190	199	140	84	1289

Monthly and yearly statistics for previous record (Oct 1960 to Dec 1980)

Mean	Avg	3 600	2 745	3 108	2 186	1 369	0 826	0 708	1 360	1 522	2 353	3 243	3 548	2 213
flows	Low	0 291	0 280	0 842	0 424	0 148	0 130	0 095	0 098	0 147	0 195	0 951	0 944	1 447
(m ³ s ⁻¹)	High	7 155	6 881	8 926	4 682	3 951	2 502	2 013	4 107	4 067	6 665	6 878	6 406	2 926
Peak flow (m ³ s ⁻¹)		95 37	88 63	79 00	62 01	56 35	51 74	52 83	110 40	109 00	79 29	68 81	70 79	110 40
Runoff (mm)		112	78	97	66	43	25	22	42	46	73	98	110	811
Rainfall (mm)		115	87	93	78	78	70	75	98	93	97	110	115	1109

Factors affecting flow regime:
Station type: CC

1981 runoff is 112% of previous mean
rainfall 116%

025018 Tees at Middleton in Teesdale**1981**Measuring authority: NWA
First year: 1971Grid reference: NY 950250
Level stn. (m OD) 211.20Catchment area (sq km) 242.1
Max alt. (m OD) 893

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	14 130	9 049	17 690		2 307	6 358	5 321	4 603	9 590	15 020	15 020	10 070	
(m ³ s ⁻¹)	Peak	95.58	186.10	123.20			65.19	29.96	23.33	176.90	135.60	149.70	46.57	
Runoff (mm)		156	90	196		26	68	59	51	103	166	161	111	
Rainfall (mm)		147	95	248	98	114	105	90	50	245	233	240	92	1755

Monthly and yearly statistics for previous record (Jul 1971 to Dec 1980—incomplete or missing months total 0.2 years)

Mean	Avg	12 400	10 240	10 860	7 723	5 831	4 882	4 462	5 745	6 198	7 596	10 570	12 550	8 249
flows	Low	7 078	4 484	3 955	2 619	3 134	3 286	3 119	3 091	2 967	4 499	5 740	3 805	6 092
(m ³ s ⁻¹)	High	19 420	16 530	23 880	17 810	10 700	10 470	5 918	10 440	7 725	14 440	14 530	24 100	10 632
Peak flow (m ³ s ⁻¹)		258.80	96.98	255.10	83.28	112.10	86.09	85.11	185.90	184.40	180.40	181.50	151.30	258.80
Runoff (mm)		137	104	120	83	65	52	49	64	66	84	113	139	1076
Rainfall (mm)		175	109	131	83	88	93	89	112	122	119	166	175	1462

Factors affecting flow regime: SR
Station type: VA1981 runoff is % of previous mean
rainfall 120%**025019 Leven at Easby****1981**Measuring authority: NWA
First year: 1971Grid reference: NZ 585087
Level stn. (m OD) 101.30Catchment area (sq km) 14.8
Max alt. (m OD) 335

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.168	0.166	0.509	0.226	0.157	0.091	0.184	0.101	0.099	0.193	0.164	0.291	0.198
(m ³ s ⁻¹)	Peak	0.30	0.59	4.90	1.18	0.43	0.16	2.63	0.48	1.11	1.35	2.16	2.69	4.90
Runoff (mm)		30	27	92	40	28	16	33	18	17	35	29	53	419
Rainfall (mm)		35	47	133	56	67	33	105	45	99	82	60	70	832

Monthly and yearly statistics for previous record (May 1971 to Dec 1980)

Mean	Avg	0.333	0.366	0.308	0.211	0.172	0.134	0.112	0.132	0.136	0.194	0.192	0.287	0.214
flows	Low	0.115	0.100	0.076	0.085	0.088	0.075	0.044	0.039	0.061	0.063	0.102	0.132	0.143
(m ³ s ⁻¹)	High	0.630	0.729	0.821	0.390	0.386	0.239	0.189	0.365	0.532	0.556	0.324	0.543	0.305
Peak flow (m ³ s ⁻¹)		3.14	4.38	4.83	2.41	4.00	1.87	3.14	3.88	12.83	3.08	3.15	4.51	12.83
Runoff (mm)		60	61	56	37	31	23	20	24	24	35	34	52	457
Rainfall (mm)		88	55	69	50	81	62	87	74	75	77	74	80	832

Factors affecting flow regime: N
Station type: FV1981 runoff is 92% of previous mean
rainfall 100%**025020 Skerne at Preston le Skerne****1981**Measuring authority: NWA
First year: 1972Grid reference: NZ 292238
Level stn. (m OD) 67.50Catchment area (sq km) 147.0
Max alt. (m OD) 222

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.715	0.487	2.816	0.944	0.434	0.275	0.256	0.216	0.444	1.955	0.844	1.638	0.919
(m ³ s ⁻¹)	Peak	2.60	1.64	20.35	11.25	1.18	0.87	0.54	0.88	9.33	21.71	12.05	19.17	21.71
Runoff (mm)		13	8	51	17	8	5	5	4	8	36	15	30	199
Rainfall (mm)		30	24	99	47	51	30	52	40	116	90	53	54	686

Monthly and yearly statistics for previous record (Dec 1972 to Dec 1980—incomplete or missing months total 0.3 years)

Mean	Avg	1.532	1.557	1.474	0.722	0.710	0.468	0.435	0.438	0.349	0.969	0.777	1.583	0.917
flows	Low	0.553	0.481	0.293	0.311	0.348	0.112	0.123	0.086	0.082	0.099	0.204	0.553	0.568
(m ³ s ⁻¹)	High	3.376	2.731	4.824	1.619	1.853	0.685	0.760	0.732	0.745	4.290	1.612	4.658	1.610
Peak flow (m ³ s ⁻¹)		18.48	12.93	26.58	6.78	10.63	8.36	9.73	7.95	1.90	14.94	17.40	24.82	26.58
Runoff (mm)		28	26	27	13	13	8	8	8	6	18	14	29	197
Rainfall (mm)		63	43	56	37	54	52	50	59	60	56	52	63	646

Factors affecting flow regime: E
Station type: VA1981 runoff is 101% of previous mean
rainfall 106%**026003 Foston Beck at Foston Mill****1981**Measuring authority: YWA
First year: 1959Grid reference: TA 093548
Level stn. (m OD)Catchment area (sq km) 57.2
Max alt. (m OD) 164

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1.027	0.992	1.350	1.767	1.378	0.969	0.717	0.514	0.393	0.347	0.330	0.438	0.852
(m ³ s ⁻¹)	Peak	1.13	1.71	2.09	2.70	1.52	1.17	1.00	0.75	0.54	0.47	0.54	1.10	2.70
Runoff (mm)		48	42	63	80	65	44	34	24	18	16	15	21	469
Rainfall (mm)		39	69	118	81	45	73	71	64	87	86	54	64	801

Monthly and yearly statistics for previous record (Oct 1959 to Dec 1980—incomplete or missing months total 0.6 years)

Mean	Avg	0.898	1.195	1.118	0.972	0.806	0.627	0.505	0.400	0.336	0.332	0.460	0.652	0.889
flows	Low	0.199	0.183	0.174	0.150	0.174	0.110	0.112	0.105	0.101	0.125	0.148	0.195	0.166
(m ³ s ⁻¹)	High	2.224	2.332	2.242	2.070	1.708	1.231	0.882	0.675	0.567	0.612	1.845	2.379	1.282
Peak flow (m ³ s ⁻¹)		2.89	3.31	2.69	2.49	1.92	2.01	1.47	0.99	0.80	1.22	2.49	2.86	3.31
Runoff (mm)		42	51	52	44	38	28	24	19	15	16	21	31	380
Rainfall (mm)		74	53	52	50	55	50	58	66	57	69	76	76	736

Factors affecting flow regime: N
Station type: TP1981 runoff is 123% of previous mean
rainfall 109%

026004 Gypsey Race at Bridlington**1981**Measuring authority: YWA
First year: 1971Grid reference: TA 165675
Level stn. (m OD): 11.00Catchment area (sq km): 253.8
Max alt. (m OD): 211**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.397	0.430	0.899	1.611	1.200	0.562	0.291	0.147	0.052	0.034	0.012	0.014	0.471
(m ³ s ⁻¹)	Peak	0.48	0.58	2.09	2.10	1.56	0.86	0.51	0.26	0.09	0.13	0.05	0.12	2.10
Runoff (mm)		4	4	9	16	13	6	3	2	1	0	0	0	58
Rainfall (mm)		35	66	132	81	48	24	69	55	93	87	49	64	803

Monthly and yearly statistics for previous record (Jan 1971 to Dec 1980—incomplete or missing months total 2.9 years)

Mean	Avg	0.166	0.486	0.927	0.752	0.408	0.261	0.126	0.071	0.026	0.013	0.021	0.120	0.280
flows	Low	0	0	0.005	0.010	0	0	0	0	0	0	0	0	0.002
(m ³ s ⁻¹)	High	0.827	2.043	2.419	2.240	1.021	0.846	0.458	0.284	0.149	0.060	0.108	0.363	0.633
Peak flow (m ³ s ⁻¹)		1.36	2.56	3.51	3.19	1.45	0.98	0.66	0.43	0.21	0.10	0.17	0.62	3.51
Runoff (mm)		2	5	10	8	4	3	1	1	0	0	0	1	35
Rainfall (mm)		81	50	57	44	55	53	53	65	57	70	60	78	723

Factors affecting flow regime: G I
Station type: C1981 runoff is 167% of previous mean
rainfall: 111%**027007 Ure at Westwick Lock****1981**Measuring authority: YWA
First year: 1958Grid reference: SE 356671
Level stn. (m OD): 14.19Catchment area (sq km): 914.6
Max alt. (m OD): 713**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	30.340	20.540	57.100	16.020	14.580	14.200	4.860	3.869	17.540	36.070	29.990	13.310	21.535
(m ³ s ⁻¹)	Peak	104.50	180.80	211.00	87.58	45.24	59.23	24.68	11.97	129.30	180.80	142.20	59.23	211.00
Runoff (mm)		89	54	167	45	43	40	14	11	50	106	85	39	744
Rainfall (mm)		93	92	214	81	89	63	56	60	174	166	114	71	1273

Monthly and yearly statistics for previous record (Oct 1958 to Dec 1980—incomplete or missing months total 0.4 years)

Mean	Avg	31.300	29.520	25.520	20.290	12.880	8.186	8.254	11.780	13.900	21.080	28.550	31.970	20.228
flows	Low	4.009	3.886	10.250	5.674	3.831	3.024	2.421	1.287	1.450	5.856	7.078	11.330	12.946
(m ³ s ⁻¹)	High	52.280	84.770	60.330	40.980	29.400	21.400	16.180	31.600	33.030	68.480	65.010	57.370	27.066
Peak flow (m ³ s ⁻¹)		246.90	307.30	413.10	263.30	170.80	161.50	144.50	260.20	296.20	266.50	288.80	283.20	413.10
Runoff (mm)		92	79	75	58	38	23	24	34	39	62	81	94	698
Rainfall (mm)		118	85	88	79	74	70	82	90	96	100	120	122	1124

Factors affecting flow regime: S P
Station type: B VA1981 runoff is 107% of previous mean
rainfall: 113%**027031 Colne at Colnebridge****1981**Measuring authority: YWA
First year: 1964Grid reference: SE 174199
Level stn. (m OD): 47.95Catchment area (sq km): 245.0
Max alt. (m OD): 587**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	10.160	7.266	17.800	5.106	3.630	1.845	1.383	3.067	7.899	7.574	8.515	4.117	8.030
(m ³ s ⁻¹)	Peak	63.46	124.00	143.00	44.86	10.70	14.86	21.17	53.96	20.38	47.01	70.84	22.19	143.00
Runoff (mm)		11	72	195	54	40	20	15	34	20	83	90	45	777
Rainfall (mm)		126	112	231	91	88	50	51	99	123	188	147	91	1397

Monthly and yearly statistics for previous record (Jan 1964 to Dec 1980—incomplete or missing months total 0.4 years)

Mean	Avg	6.108	7.079	5.861	4.651	2.953	2.020	2.016	2.232	3.155	4.156	6.301	7.500	4.488
flows	Low	2.132	1.873	2.730	1.278	0.843	0.677	0.598	0.369	0.807	0.694	1.321	2.410	2.483
(m ³ s ⁻¹)	High	11.510	16.720	16.020	12.180	7.024	4.572	6.420	5.799	13.780	10.750	10.500	21.410	6.676
Peak flow (m ³ s ⁻¹)		127.00	93.45	120.60	155.50	93.45	35.89	82.64	73.62	210.60	272.10	121.50	154.60	272.10
Runoff (mm)		67	70	64	49	32	21	22	24	33	45	67	82	578
Rainfall (mm)		104	93	94	78	80	74	80	90	103	100	129	125	1150

Factors affecting flow regime: S P G I
Station type: C VA1981 runoff is 134% of previous mean
rainfall: 121%**027042 Dove at Kirkby Mills****1981**Measuring authority: YWA
First year: 1972Grid reference: SE 705855
Level stn. (m OD): 35.60Catchment area (sq km): 51.8
Max alt. (m OD): 429**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1.145	1.039	3.062	1.370	1.115	0.609	0.892	0.653	0.774	1.370	1.003	1.325	1.196
(m ³ s ⁻¹)	Peak	2.88	2.72	39.34	5.00	4.20	0.96	9.87	4.01	14.57	5.17	6.96	15.44	39.34
Runoff (mm)		59	49	158	69	58	30	46	34	39	71	50	69	731
Rainfall (mm)		44	62	172	73	96	42	114	64	129	107	73	71	1047

Monthly and yearly statistics for previous record (Feb 1972 to Dec 1980)

Mean	Avg	1.706	1.860	1.621	1.043	0.817	0.633	0.514	0.564	0.706	1.113	1.118	1.719	1.115
flows	Low	0.699	0.541	0.347	0.376	0.446	0.279	0.211	0.161	0.246	0.251	0.543	0.853	0.640
(m ³ s ⁻¹)	High	2.861	3.180	4.701	1.686	1.702	1.099	0.922	1.397	2.743	2.683	1.671	3.237	1.554
Peak flow (m ³ s ⁻¹)		23.63	36.68	40.93	4.39	15.44	6.94	19.33	32.36	56.38	24.71	23.85	37.94	56.38
Runoff (mm)		88	88	84	52	42	32	27	29	35	58	56	89	680
Rainfall (mm)		99	70	79	54	70	64	70	70	86	92	83	104	941

Factors affecting flow regime: N
Station type: FV1981 runoff is 108% of previous mean
rainfall: 111%

027043 Wharfe at Addingham

1981

Measuring authority: YWA
First year: 1974

Grid reference: SE 092494
Level stn. (m OD) 79.70

Catchment area (sq km) 427.0
Max alt. (m OD): 704

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	25 340	17 010	51 080	8 770	8 247	9 523	3 968	3 464	16 340	29 430	25 720	5 971	17 072
(m ³ s ⁻¹)	Peak	149 20	342 00	367 20	66 71	42 37	60 62	22 96	21 74	230 60	205 10	300 90	28 96	367 20
Runoff (mm)		159	96	320	53	52	58	25	22	99	185	156	37	1263
Rainfall (mm)		133	102	280	72	94	86	64	63	202	196	160	79	1531

Monthly and yearly statistics for previous record (Jan 1974 to Dec 1980—incomplete or missing months total 0.3 years)

Mean	Avg	25 320	18 370	19 930	9 006	7 483	3 758	4 776	8 384	14 490	17 420	24 540	25 890	14 943
Flows	Low	18 670	8 801	6 391	2 453	1 766	1 740	2 006	1 143	8 215	6 427	9 858	12 300	10 487
(m ³ s ⁻¹)	High	32 470	28 410	52 490	17 500	14 770	5 716	9 543	17 080	23 460	37 310	32 450	44 680	19 543
Peak flow (m ³ s ⁻¹)		509 00	217 20	552 60	205 10	89 87	45 07	163 80	111 20	244 90	370 00	400 00	320 30	552 60
Runoff (mm)		159	105	125	55	47	23	30	53	88	109	149	162	1105
Rainfall (mm)		140	120	136	6	33	126	79	166	124	234	182	175	1571
(1980 only)														

Factors affecting flow regime: S P
Station type: C VA

1981 runoff is 114% of previous mean
rainfall 97%

027059 Laver at Ripon

1981

Measuring authority: YWA
First year: 1977

Grid reference: SE 301710
Level stn. (m OD) 29.60

Catchment area (sq km) 87.5
Max alt. (m OD): 406

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1 519	1 457	3 626	1 294	0 729	0 488	0 210	0 225	0 462	1 506	0 959	0 848	1 110
(m ³ s ⁻¹)	Peak	13 61	15 76	22 65	8 38	2 66	7 42	0 68	2 05	10 21	13 64	5 94	8 13	22 65
Runoff (mm)		46	40	111	38	22	14	6	7	14	46	28	26	400
Rainfall (mm)		76	85	158	69	73	48	44	55	130	138	85	75	1036

Monthly and yearly statistics for previous record (Nov 1977 to Dec 1980—incomplete or missing months total 0.2 years)

Mean	Avg	2 036	2 125	2 356	1 018	0 876	0 489	0 299	0 545	0 308	0 616	1 199	-2 595	1 199
Flows	Low	1 713	1 962	1 332	0 626	0 322	0 283	0 189	0 289	0 253	0 167	0 442	-1 431	1 128
(m ³ s ⁻¹)	High	2 540	2 289	3 850	1 520	1 233	0 694	0 480	0 841	0 391	1 104	1 930	3 786	1 128
Peak flow (m ³ s ⁻¹)		17 74	12 27	18 85	7 03	8 78	15 67	6 29	11 48	5 16	9 07	12 91	39 14	39 14
Runoff (mm)		62	59	72	30	25	14	9	17	9	19	36	79	432
Rainfall (mm)		94	96	105	9	24	140	54	113	48	126	99	78	986
(1980 only)														

Factors affecting flow regime: S P
Station type: C

1981 runoff is 93% of previous mean
rainfall 105%

028018 Dove at Marston on Dove

1981

Measuring authority: STWA
First year: 1962

Grid reference: SK 235288
Level stn. (m OD) 47.20

Catchment area (sq km): 883.2
Max alt. (m OD): 555

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	28 970	19 470	36 570	17 130	17 700	10 910	7 659	5 733	13 300	22 870	19 890	23 180	18 444
(m ³ s ⁻¹)	Peak	103 70	90 67	129 70	69 22	45 46	42 30	29 28	10 87	90 67	53 33	86 10	202 80	202 80
Runoff (mm)		82	53	111	50	54	32	23	17	39	69	58	70	660
Rainfall (mm)		97	80	146	72	91	48	63	47	145	115	87	87	1078

Monthly and yearly statistics for previous record (Oct 1961 to Dec 1980—incomplete or missing months total 0.6 years)

Mean	Avg	22 440	21 730	16 940	13 870	12 550	9 235	8 675	8 573	9 104	10 790	16 630	21 790	14 330
Flows	Low	7 822	4 615	8 158	6 195	4 831	3 452	2 434	1 913	2 821	3 495	5 684	7 907	7 655
(m ³ s ⁻¹)	High	44 930	55 910	29 730	25 670	25 800	14 700	17 010	18 130	33 240	21 850	31 070	61 220	21 755
Peak flow (m ³ s ⁻¹)		157 90	194 60	98 26	100 30	109 00	71 64	117 10	101 10	112 10	128 00	130 80	137 10	194 60
Runoff (mm)		68	60	51	41	38	27	26	26	27	33	49	66	512
Rainfall (mm)		89	74	70	65	77	72	70	87	80	77	96	94	946

Factors affecting flow regime: SRPG
Station type: FV

1981 runoff is 129% of previous mean
rainfall 114%

028031 Manifold at Ilam

1981

Measuring authority: STWA
First year: 1968

Grid reference: SK 140507
Level stn. (m OD) 131.00

Catchment area (sq km) 148.5
Max alt. (m OD) 513

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	7 878	4 759	9 455	4 509	4 465	2 669	1 740	1 159	3 472	6 697	6 139	4 695	4 799
(m ³ s ⁻¹)	Peak	50 79	27 14	49 89	43 09	27 92	21 48		2 18	45 69	26 87	52 00	43 42	
Runoff (mm)		141	78	171	79	81	47	31	21	61	121	107	85	1021
Rainfall (mm)		130	87	177	79	98	54	74	53	159	149	120	95	1275

Monthly and yearly statistics for previous record (May 1968 to Dec 1980—incomplete or missing months total 0.1 years)

Mean	Avg	5 821	5 686	4 438	3 409	2 459	1 641	1 535	1 886	1 676	2 744	4 934	5 118	3 435
Flows	Low	3 657	2 935	2 578	1 277	0 812	0 745	0 493	0 386	0 535	0 716	1 555	2 135	2 241
(m ³ s ⁻¹)	High	7 795	12 710	9 003	5 828	5 713	3 443	3 481	4 517	4 147	6 661	8 198	8 741	4 310
Peak flow (m ³ s ⁻¹)		54 95	54 82	27 93	35 28	49 48	22 61	37 29	137 00	28 29	75 78	91 61	43 14	137 00
Runoff (mm)		105	93	80	59	44	29	28	34	29	49	86	92	730
Rainfall (mm)		125	98	87	63	78	75	78	70	84	97	118	110	1078
(1971-1980)														

Factors affecting flow regime: P E
Station type: C

1981 runoff is 140% of previous mean
rainfall 118%

028039 Rea at Calthorpe Park

1981

Measuring authority STWA
First year 1967
Grid reference SP 071847
Level stn (m OD) 104.24
Catchment area (sq km) 74.0
Max alt (m OD) 286

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.938	1.020	2.101	0.986	1.052	0.711	0.450	0.614	1.423	0.941	0.628	1.811	1.086
(m ³ s ⁻¹)	Peak	5.85	9.44	21.71	12.97	9.61	25.45		15.49	30.01	16.38	6.27	54.02	
Runoff (mm)		34	33	76	35	38	25	16	22	50	34	22	66	451
Rainfall (mm)		51	56	116	50	98	32	25	54	159	80	43	112	876

Monthly and yearly statistics for previous record (May 1967 to Dec 1980—incomplete or missing months total 1.1 years)

Mean	Avg	1.224	1.232	1.038	0.700	0.767	0.641	0.495	0.631	0.609	0.635	0.873	1.070	0.820
flows	Low	0.601	0.549	0.483	0.316	0.355	0.287	0.258	0.367	0.295	0.320	0.493	0.530	0.602
(m ³ s ⁻¹)	High	1.634	2.610	1.688	0.954	1.780	1.324	0.779	1.366	1.278	1.408	1.487	1.934	1.041
Peak flow (m ³ s ⁻¹)		20.73	27.44	27.85	12.88	30.37	37.44	27.85	41.25	40.85	23.28	24.97	29.62	41.26
Runoff (mm)		44	41	38	25	28	22	18	23	21	23	29	39	360
Rainfall (mm)		80	74	66	46	58	61	48	66	71	60	63	82	775
(1971-1980)														

Factors affecting flow regime E
Station type: C
1981 runoff is 129% of previous mean
rainfall 113%

028072 Greet at Southwell

1981

Measuring authority STWA
First year 1974
Grid reference SK 711541
Level stn (m OD) 20.40
Catchment area (sq km) 46.2
Max alt (m OD)

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.345	0.524	0.880	0.965	0.434	0.342	0.192	0.172	0.188	0.217	0.179	0.323	0.397
(m ³ s ⁻¹)	Peak	1.45	5.46	3.12	19.62	0.97	2.45		0.48	0.53	0.52	0.31	5.99	
Runoff (mm)		20	27	51	54	25	19	11	10	11	13	10	19	270
Rainfall (mm)		34	60	102	79	58	37	17	41	107	67	30	57	689

Monthly and yearly statistics for previous record (Jan 1976 to Dec 1977)

Mean	Avg	0.496	1.255	0.342	0.239	0.191	0.165	0.110	0.107	0.122	0.185	0.185	0.287	0.301
flows	Low	0.232	0.153	0.141	0.132	0.118	0.088	0.068	0.061	0.103	0.153	0.175	0.244	0.163
(m ³ s ⁻¹)	High	0.759	2.358	0.543	0.347	0.263	0.241	0.153	0.154	0.140	0.217	0.194	0.330	0.448
Peak flow (m ³ s ⁻¹)		3.41	22.27	3.19	0.69	0.43	0.87	0.69	1.38	0.90	1.04	1.13	2.69	22.27
Runoff (mm)		29	66	20	13	11	9	6	6	7	11	10	17	206
Rainfall (mm)		64	74	54	35	44	59	33	56	43	62	48	85	667
(1976-1980)														

Factors affecting flow regime
Station type: FV
1981 runoff is 131% of previous mean
rainfall 105%

028080 Tame at Lea Marston Lakes

1981

Measuring authority STWA
First year 1981
Grid reference SP 207937
Level stn (m OD) 66.23
Catchment area (sq km) 799.0
Max alt (m OD)

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	15.870	15.660	26.590	18.090	15.680	11.250	9.382	11.090	17.530	15.060	11.870	22.990	15.761
(m ³ s ⁻¹)	Peak													
Runoff (mm)		53	47	89	52	53	36	31	37	57	50	39.41	219.20	622
Rainfall (mm)														

Monthly and yearly statistics for previous record (Oct 1957 to Dec 1980—incomplete or missing months total 0.3 years)

Mean	Avg	17.270	17.610	15.090	13.100	12.390	10.880	10.220	10.810	11.030	11.970	13.960	16.280	13.383
flows	Low	8.994	8.855	8.797	7.259	7.321	6.655	6.369	6.978	6.855	7.852	7.876	9.057	8.699
(m ³ s ⁻¹)	High	24.130	35.140	20.510	21.200	24.690	14.680	17.220	18.970	19.440	25.600	27.880	32.880	17.355
Peak flow (m ³ s ⁻¹)														
Runoff (mm)		58	54	51	42	42	35	34	36	36	40	45	55	528
Rainfall (mm)														

Factors affecting flow regime
Station type:
1981 runoff is 118% of previous mean

029003 Lud at Louth

1981

Measuring authority AWA
First year 1968
Grid reference TF 337879
Level stn (m OD) 15.42
Catchment area (sq km) 55.2
Max alt (m OD) 159

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.795	0.897	1.201	1.242	1.177	0.669	0.493	0.365	0.290	0.276	0.242	0.295	0.662
(m ³ s ⁻¹)	Peak	0.98	3.81	2.20	5.06	1.71	1.62	0.83	1.28	1.14	0.54	0.53	2.07	5.06
Runoff (mm)		39	39	58	58	57	31	24	18	14	13	11	14	377
Rainfall (mm)		42	61	130	126	47	32	32	51	101	72	35	52	781

Monthly and yearly statistics for previous record (Aug 1968 to Dec 1980)

Mean	Avg	0.596	0.815	0.774	0.686	0.529	0.402	0.317	0.274	0.241	0.253	0.329	0.408	0.467
flows	Low	0.139	0.157	0.162	0.150	0.156	0.131	0.112	0.102	0.112	0.130	0.132	0.125	0.178
(m ³ s ⁻¹)	High	1.279	1.428	1.338	1.289	0.914	0.687	0.507	0.414	0.625	0.719	1.158	0.912	0.703
Peak flow (m ³ s ⁻¹)		3.68	3.58	3.58	3.60	3.51	3.23	3.40	3.10	3.30	2.96	6.77	3.10	6.77
Runoff (mm)		29	36	38	32	26	19	15	13	11	12	15	20	267
Rainfall (mm)		66	50	58	51	49	54	53	64	51	52	72	69	669

Factors affecting flow regime PG 1
Station type: C
1981 runoff is 141% of previous mean
rainfall 113%

030004 Partney Lymn at Partney Mill**1981**Measuring authority: AWA
First year: 1962Grid reference: TF 402676
Level stn. (m OD) 14.95Catchment area (sq km): 61.6
Max alt. (m OD): 142

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg.	0.702	0.794	1.538	1.518	0.670	0.372	0.285	0.306	0.312	0.448	0.405	0.732	0.674
(m ³ s ⁻¹)	Peak	2.52	7.33	7.71	13.34	1.39	0.63	0.53	1.59	1.87	1.43	1.09	6.31	13.34
Runoff (mm)		31	31	67	64	29	16	12	13	13	19	17	32	344
Rainfall (mm)		41	50	122	122	55	24	29	44	93	68	30	48	726

Monthly and yearly statistics for previous record (Jun 1962 to Dec 1980—incomplete or missing months total 0.4 years)

Mean	Avg	0.791	0.799	0.691	0.575	0.436	0.298	0.277	0.283	0.284	0.373	0.543	0.725	0.505
flows	Low	0.351	0.300	0.276	0.228	0.200	0.116	0.088	0.107	0.151	0.190	0.193	0.210	0.292
(m ³ s ⁻¹)	High	1.475	1.838	1.462	1.072	0.798	0.619	0.862	0.593	0.917	1.144	1.112	1.804	0.754
Peak flow (m ³ s ⁻¹)		8.44	12.59	9.16	8.91	8.56	8.13	13.38	7.06	6.64	8.07	10.17	8.48	13.38
Runoff (mm)		34	32	30	24	19	13	12	12	12	16	23	32	259
Rainfall (mm)		59	51	57	54	53	57	55	66	53	48	74	66	693

Factors affecting flow regime: G I
Station type: C1981 runoff is 133% of previous mean
rainfall 105%**031002 Glen at Kates Bridge****1981**Measuring authority: AWA
First year: 1960Grid reference: TF 106149
Level stn. (m OD) 6.10Catchment area (sq km): 341.9
Max alt. (m OD): 129

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg.	0.858	0.891	2.884	2.418	1.639	0.983	0.453	0.226	0.161	0.229	0.160	0.338	0.937
(m ³ s ⁻¹)	Peak	4.29	3.60	9.40	23.30	2.88	6.04	1.53	0.45	0.81	1.00	0.21	6.73	23.30
Runoff (mm)		7	6	23	18	13	7	4	2	1	2	1	3	86
Rainfall (mm)		37	36	91	72	67	36	27	46	93	55	26	47	628

Monthly and yearly statistics for previous record (Oct 1960 to Dec 1980)

Mean	Avg	1.453	1.863	1.794	1.344	1.069	0.508	0.359	0.359	0.338	0.427	0.713	1.129	0.942
flows	Low	0.094	0.048	0.032	0.018	0.006	0.004	0	0.001	0.008	0.024	0.018	0.075	0.135
(m ³ s ⁻¹)	High	3.256	6.994	4.256	3.631	3.604	1.547	1.091	1.367	1.601	1.663	3.750	4.183	1.885
Peak flow (m ³ s ⁻¹)		15.89	17.05	28.50	11.67	15.14	11.15	5.24	14.16	5.24	5.06	25.98	15.18	28.50
Runoff (mm)		11	13	14	10	8	4	3	3	3	3	5	9	87
Rainfall (mm)		53	44	47	51	51	51	51	64	48	48	59	60	627

Factors affecting flow regime: G
Station type: FV1981 runoff is 99% of previous mean
rainfall 100%**031007 Welland at Barrowden****1981**Measuring authority: AWA
First year: 1967Grid reference: SP 948999
Level stn. (m OD) 34.90Catchment area (sq km): 398.9
Max alt. (m OD): 228

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg.	4.147	2.395	8.724	7.092	3.329	2.691	0.624	0.883	1.049	1.402	1.275	3.615	3.102
(m ³ s ⁻¹)	Peak	19.48	8.21	42.86	79.43	8.57	27.44	0.92	8.91	10.36	7.67	3.18	35.85	79.43
Runoff (mm)		28	15	59	46	22	17	4	6	7	9	8	24	246
Rainfall (mm)		42	32	97	67	68	38	25	71	103	54	31	51	679

Monthly and yearly statistics for previous record (Feb 1968 to Dec 1980—incomplete or missing months total 0.6 years)

Mean	Avg	4.400	5.973	4.105	2.160	1.715	0.860	0.892	0.850	0.698	1.309	1.869	3.518	2.346
flows	Low	0.517	0.425	0.353	0.257	0.232	0.159	0.092	0.153	0.271	0.229	0.317	0.411	1.037
(m ³ s ⁻¹)	High	8.949	17.030	9.687	7.699	6.030	3.095	4.468	4.501	4.329	5.150	6.430	6.528	3.666
Peak flow (m ³ s ⁻¹)		21.39	74.42	107.80	48.34	37.55	8.55	38.23	39.91	12.55	22.87	50.37	40.13	107.80
Runoff (mm)		30	37	28	14	12	6	6	6	5	9	12	24	186
Rainfall (mm)		59	49	49	44	53	56	55	67	46	45	58	60	641

Factors affecting flow regime: S E
Station type: C1981 runoff is 132% of previous mean
rainfall 106%**031010 Chater at Fosters Bridge****1981**Measuring authority: AWA
First year: 1968Grid reference: SK 961030
Level stn. (m OD) 38.40Catchment area (sq km): 68.9
Max alt. (m OD): 230

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg.	0.762	0.528	1.677	1.213	0.742	0.626	0.206	0.207	0.217	0.378	0.255	0.545	0.609
(m ³ s ⁻¹)	Peak	4.40	1.72	5.88	14.77	1.54	11.78	0.32	0.21	1.69	1.68	0.73	8.05	14.77
Runoff (mm)		30	19	65	46	29	24	8	8	8	13	10	21	279
Rainfall (mm)		47	34	101	78	69	45	25	65	107	58	32	52	713

Monthly and yearly statistics for previous record (Feb 1968 to Dec 1980)

Mean	Avg	0.947	1.096	0.839	0.641	0.442	0.233	0.212	0.204	0.191	0.330	0.444	0.748	0.625
flows	Low	0.147	0.106	0.090	0.065	0.051	0.033	0.024	0.044	0.067	0.048	0.073	0.098	0.202
(m ³ s ⁻¹)	High	1.682	3.094	1.642	1.670	1.467	0.649	0.872	0.818	0.998	1.018	1.215	1.465	0.828
Peak flow (m ³ s ⁻¹)		12.22	16.06	15.77	15.07	16.44	3.45	20.64	20.76	4.25	6.66	12.48	11.00	20.76
Runoff (mm)		37	39	33	24	17	9	8	8	7	13	17	29	240
Rainfall (mm)		59	50	50	47	52	57	53	70	46	47	59	60	666

Factors affecting flow regime:
Station type: CC1981 runoff is 116% of previous mean
rainfall 110%

032003

Harpers Brook at Old Mill Bridge

1981

Measuring authority AWA
First year 1938

Grid reference SP 983799
Level stn (m OD) 30.30

Catchment area (sq km) 74.3
Max alt (m OD) 146

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows (m ³ s ⁻¹)	Avg	0.534	0.331	1.453	1.334	0.720	0.606	0.152	0.134	0.141	0.142	0.144	0.475	0.514
	Peak	4.96	1.25	7.09	22.00	4.51	17.50	0.35	0.82	0.95	0.56	0.35	9.05	22.00
Runoff (mm)		19	11	52	47	26	21	5	5	5	5	5	17	218
Rainfall (mm)		38	31	97	87	74	46	25	47	84	47	33	56	686

Monthly and yearly statistics for previous record (Dec 1938 to Dec 1980—incomplete or missing months total 0.4 years)

Mean	Avg	0.785	0.851	0.702	0.443	0.298	0.202	0.147	0.156	0.148	0.206	0.436	0.575	0.410
Flows (m ³ s ⁻¹)	Low	0.097	0.080	0.076	0.065	0.056	0.048	0.053	0.048	0.049	0.057	0.069	0.077	0.159
	High	2.766	2.496	2.363	1.307	1.215	1.050	0.685	0.791	1.162	0.980	1.688	1.775	0.692
Peak flow (m ³ s ⁻¹)		16.06	18.58	17.01	16.06	17.39	10.54	12.49	20.50	6.80	7.73	11.74	15.81	20.60
Runoff (mm)		28	28	25	15	11	7	5	6	5	7	15	21	174
Rainfall (mm)		59	44	47	42	50	51	53	65	49	52	61	57	630

Factors affecting flow regime
Station type CC

1981 runoff is 125% of previous mean
rainfall 106%

032004

Ise Brook at Harrowden Old Mill

1981

Measuring authority AWA
First year 1943

Grid reference SP 898715
Level stn (m OD) 45.31

Catchment area (sq km) 194.0
Max alt (m OD) 197

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows (m ³ s ⁻¹)	Avg	2.185	1.417	4.359	3.020	2.532	2.421	0.680	0.720	0.726	0.857	0.752	1.642	1.778
	Peak	7.90	3.32	13.90	20.77	7.11	24.04	1.24	4.10	3.17	4.10	1.61	14.94	24.04
Runoff (mm)		30	18	60	40	35	32	9	10	10	12	10	23	289
Rainfall (mm)		43	31	96	81	80	51	25	48	98	51	34	55	693

Monthly and yearly statistics for previous record (Dec 1943 to Dec 1980—incomplete or missing months total 1.4 years)

Mean	Avg	2.465	2.761	2.289	1.476	1.093	0.695	0.586	0.557	0.510	0.751	1.415	1.954	1.373
Flows (m ³ s ⁻¹)	Low	0.459	0.324	0.219	0.329	0.143	0.128	0.166	0.110	0.128	0.185	0.176	0.219	0.422
	High	6.441	6.949	7.984	3.834	3.640	2.246	3.018	2.655	2.283	4.384	5.331	5.859	2.337
Peak flow (m ³ s ⁻¹)		17.10	17.51	28.39	15.70	17.73	16.75	19.54	25.10	7.79	13.08	16.00	16.99	28.39
Runoff (mm)		34	35	32	20	15	9	8	8	7	10	19	27	223
Rainfall (mm)		54	44	47	43	52	53	53	66	53	51	59	59	634

Factors affecting flow regime S E
Station type FV

1981 runoff is 130% of previous mean
rainfall 109%

033003

Cam at Bottisham

1981

Measuring authority AWA
First year 1936

Grid reference TL 508657
Level stn (m OD) 2.39

Catchment area (sq km) 803.0
Max alt (m OD) 168

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows (m ³ s ⁻¹)	Avg	2.865	2.168	6.418	5.035	4.273	2.545	2.060	2.082	1.653	3.114	2.319	3.609	3.178
	Peak													
Runoff (mm)		10	7	21	16	14	8	7	7	5	10	7	12	125
Rainfall (mm)		37	16	93	55	67	24	65	38	79	66	32	50	622

Monthly and yearly statistics for previous record (Oct 1936 to Dec 1980—incomplete or missing months total 1.8 years)

Mean	Avg	6.106	6.519	6.100	4.646	3.370	2.285	1.922	1.740	1.691	2.013	3.402	4.247	3.656
Flows (m ³ s ⁻¹)	Low	1.058	1.441	1.298	1.427	0.944	0.517	0.621	0.471	0.784	0.803	0.880	1.235	1.370
	High	19.210	16.410	19.610	18.430	8.775	5.400	6.419	5.471	6.698	5.423	12.120	12.070	8.279
Peak flow (m ³ s ⁻¹)		35.40	32.00	36.53	43.89	16.85	10.31	6.74	25.83	30.30	17.61	30.58	70.17	70.17
Runoff (mm)		20	20	20	15	11	7	6	6	5	7	11	14	144
Rainfall (mm)		51	37	42	39	45	47	53	58	50	51	59	51	583

Factors affecting flow regime GEI
Station type MIS

1981 runoff is 87% of previous mean
rainfall 107%

033004

Lark at Isleham

1981

Measuring authority AWA
First year 1936

Grid reference TL 648760
Level stn (m OD) 2.44

Catchment area (sq km) 466.2
Max alt (m OD) 175

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows (m ³ s ⁻¹)	Avg	1.645	1.182	3.558	2.410	2.395	1.369	1.228	0.999	0.864			2.368	
	Peak													
Runoff (mm)		9	6	20	13	14	8	7	6	5			14	
Rainfall (mm)		44	21	103	66	74	29	54	30	75	83		56	670

Monthly and yearly statistics for previous record (Oct 1936 to Dec 1980—incomplete or missing months total 1.6 years)

Mean	Avg	2.606	2.937	3.038	2.423	1.877	1.337	1.160	0.992	0.906	1.043	1.565	1.900	1.810
Flows (m ³ s ⁻¹)	Low	0.741	0.717	0.674	0.696	0.522	0.451	0.308	0.254	0.261	0.409	0.439	0.655	0.808
	High	6.137	8.107	9.613	9.502	5.208	3.764	4.430	2.359	2.324	2.620	5.007	5.326	3.850
Peak flow (m ³ s ⁻¹)		5.95	4.70	3.06	2.01	1.59	0.96	1.27	1.13	2.07	4.05	2.12	2.49	5.95
Runoff (mm)		15	15	17	13	11	7	7	6	5	6	9	11	122
Rainfall (mm)		53	38	43	39	44	50	58	60	52	53	63	53	606

Factors affecting flow regime GEI
Station type MIS

1981 runoff is % of previous mean
rainfall 111%

033012 Kym at Meagre Farm

1981

Measuring authority: AWA
First year: 1960

Grid reference: TL 155631
Level stn. (m OD) 17.22

Catchment area (sq km): 137.5
Max alt. (m OD) 101

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.927	0.334	2.524	1.728	0.609	0.321	0.039	0.077	0.067	0.227	0.175	1.207	0.686
(m ³ s ⁻¹)	Peak	8.30	1.34	11.60	24.50	4.59	7.25	0.06	1.01	0.36	1.49	1.15	16.70	24.50
Runoff (mm)		18	6	49	33	17	6	1	1	1	4	3	24	158
Rainfall (mm)		37	25	89	86	72	33	28	49	87	57	30	53	646

Monthly and yearly statistics for previous record (May 1960 to Dec 1980—incomplete or missing months total 0.1 years)

Mean	Avg	1.350	1.568	1.179	0.686	0.345	0.182	0.164	0.120	0.051	0.334	0.658	1.001	0.632
Flows	Low	0.074	0.047	0.044	0.041	0.024	0.009	0.001	0.004	0.017	0.015	0.022	0.050	0.103
(m ³ s ⁻¹)	High	3.296	5.577	3.751	2.055	1.469	1.489	2.438	1.096	0.158	2.200	4.352	3.328	1.048
Peak flow (m ³ s ⁻¹)		25.26	22.70	30.24	30.75	20.61	24.10	16.68	23.42	1.34	25.91	34.71	33.98	34.71
Runoff (mm)		26	28	23	13	7	3	3	2	1	7	12	20	145
Rainfall (mm)		50	41	44	46	48	56	52	58	47	49	54	57	602

Factors affecting flow regime: EI
Station type: CB

1981 runoff is 109% of previous mean
rainfall 107%

033013 Sapiston at Rectory Bridge

1981

Measuring authority: AWA
First year: 1960

Grid reference: TL 896791
Level stn. (m OD) 15.62

Catchment area (sq km): 205.9
Max alt. (m OD) 97

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1.205	0.641	2.334	1.551	1.079	0.587	0.415	0.322	0.294	0.535	0.529	1.286	0.898
(m ³ s ⁻¹)	Peak	4.14	1.82	9.44	8.76	3.61	1.72	1.76	1.08	0.95	1.40	1.71	10.45	10.45
Runoff (mm)		16	8	30	20	14	7	5	4	4	7	7	17	138
Rainfall (mm)		48	24	98	67	69	34	52	19	73	83	37	59	663

Monthly and yearly statistics for previous record (May 1960 to Dec 1980)

Mean	Avg	1.203	1.257	1.060	0.792	0.562	0.342	0.259	0.240	0.261	0.308	0.610	0.904	0.647
Flows	Low	0.267	0.221	0.244	0.251	0.193	0.133	0.065	0.045	0.051	0.066	0.087	0.139	0.219
(m ³ s ⁻¹)	High	2.417	3.295	2.491	1.880	1.484	0.693	0.469	0.734	1.682	1.008	2.404	2.396	1.071
Peak flow (m ³ s ⁻¹)		7.51	10.90	10.85	6.70	7.31	1.72	2.39	2.93	8.95	6.26	6.97	6.12	10.90
Runoff (mm)		16	15	14	10	7	4	3	3	3	4	8	12	99
Rainfall (mm)		50	38	42	43	42	47	52	54	55	51	64	56	594

Factors affecting flow regime: GEI
Station type: TP

1981 runoff is 139% of previous mean
rainfall 112%

033014 Lark at Temple

1981

Measuring authority: AWA
First year: 1960

Grid reference: TL 758730
Level stn. (m OD) 8.95

Catchment area (sq km): 272.0
Max alt. (m OD) 113

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1.486	1.162	2.945	2.086	2.070	1.326	1.069	0.951	0.894	1.098	1.065	1.922	1.502
(m ³ s ⁻¹)	Peak	2.83	1.41	10.03	10.31	3.93	2.52	1.36	3.23	1.19	4.41	2.46	11.22	11.22
Runoff (mm)		15	10	29	20	20	13	11	9	9	11	10	19	175
Rainfall (mm)		45	23	102	69	76	31	54	26	79	82	37	59	683

Monthly and yearly statistics for previous record (Nov 1960 to Dec 1980)

Mean	Avg	1.733	1.867	1.768	1.537	1.280	0.983	0.842	0.777	0.817	0.797	1.122	1.424	1.242
Flows	Low	0.728	0.645	0.675	0.692	0.641	0.548	0.409	0.385	0.440	0.494	0.509	0.600	0.620
(m ³ s ⁻¹)	High	3.067	3.562	3.614	2.999	2.611	1.709	1.422	1.267	2.893	1.847	2.677	2.662	2.014
Peak flow (m ³ s ⁻¹)		10.33	12.05	12.12	9.34	9.76	4.14	3.31	5.24	22.06	5.34	10.12	10.19	22.06
Runoff (mm)		17	17	17	15	13	9	8	8	8	8	11	14	144
Rainfall (mm)		51	38	43	45	43	48	52	54	53	51	64	58	600

Factors affecting flow regime: GEI
Station type: CB

1981 runoff is 121% of previous mean
rainfall 114%

033024 Cam at Dernford

1981

Measuring authority: AWA
First year: 1963

Grid reference: TL 466506
Level stn. (m OD) 14.75

Catchment area (sq km): 194.0
Max alt. (m OD) 137

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.868	0.748	1.872	1.257	1.275	0.882	0.639	0.687	0.593	0.824	0.763	1.325	0.978
(m ³ s ⁻¹)	Peak	1.90	1.05	7.08	5.87	5.84	1.33	1.20	2.28	0.97	4.42	2.26	9.88	9.88
Runoff (mm)		12	9	26	17	18	12	9	9	8	11	10	18	159
Rainfall (mm)		35	18	101	54	73	23	71	46	86	67	35	54	663

Monthly and yearly statistics for previous record (Mar 1949 to Dec 1980—incomplete or missing months total 10.8 years)

Mean	Avg	1.347	1.529	1.372	1.201	1.006	0.731	0.586	0.583	0.574	0.660	0.895	1.119	0.964
Flows	Low	0.448	0.400	0.488	0.436	0.343	0.266	0.156	0.248	0.132	0.314	0.361	0.356	0.416
(m ³ s ⁻¹)	High	2.308	2.674	2.608	2.431	2.144	1.337	0.960	1.457	1.965	1.625	2.789	1.906	1.506
Peak flow (m ³ s ⁻¹)		9.66	14.09	10.22	9.94	13.63	3.40	3.60	4.79	10.99	6.12	12.50	11.55	14.09
Runoff (mm)		19	19	19	16	14	10	8	8	8	9	12	15	157
Rainfall (mm)		50	40	43	44	46	46	50	58	51	45	58	56	587

Factors affecting flow regime: GEI
Station type: TP

1981 runoff is 102% of previous mean
rainfall 113%

033032 Heacham at Heacham

1981

Measuring authority AWA
First year 1965
Grid reference TF 685375
Level stn (m OD) 9.37
Catchment area (sq km) 89.3
Max alt (m OD) 88

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.336	0.363	0.489	0.511	0.636	0.388	0.259	0.185	0.150	0.134	0.120	0.125	0.308
(m ³ s ⁻¹)	Peak	0.35	0.43	0.65	0.80	0.82	0.51	0.36	0.53	0.24	0.16	0.14	0.16	0.82
Runoff (mm)		10	10	15	15	19	11	8	6	4	4	3	4	109
Rainfall (mm)		49	27	108	99	65	24	53	47	85	76	43	36	712

Monthly and yearly statistics for previous record (Nov 1965 to Dec 1980—incomplete or missing months total 0.2 years)

Mean	Avg	0.223	0.319	0.342	0.316	0.256	0.212	0.170	0.145	0.132	0.123	0.122	0.168	0.210
flows	Low	0.064	0.067	0.071	0.072	0.076	0.060	0.043	0.034	0.033	0.047	0.050	0.058	0.063
(m ³ s ⁻¹)	High	0.435	0.671	0.671	0.776	0.503	0.400	0.284	0.256	0.371	0.399	0.319	0.305	0.331
Peak flow (m ³ s ⁻¹)		0.60	0.95	1.04	6.24	0.61	0.90	0.68	1.21	0.52	0.47	0.47	0.43	6.24
Runoff (mm)		7	9	10	9	8	6	5	4	4	4	4	5	74
Rainfall (mm)		57	49	48	48	57	57	62	65	54	51	77	69	694

Factors affecting flow regime: G I
Station type: C
1981 runoff is 146% of previous mean
rainfall 103%

033034 Little Ouse at Abbey Heath

1981

Measuring authority AWA
First year 1968
Grid reference TL 851844
Level stn (m OD) 7.23
Catchment area (sq km) 699.3
Max alt (m OD) 98

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	6.913	4.728	10.070	7.599	6.383	3.616	2.507	1.942	1.723	2.564	2.853	4.322	4.602
(m ³ s ⁻¹)	Peak	14.73	5.97	22.40	23.52	14.36	4.97	3.43	3.43	2.64	4.56	4.67	21.37	23.52
Runoff (mm)		26	16	39	28	24	13	10	7	6	10	11	17	208
Rainfall (mm)		56	25	100	77	66	33	56	15	72	86	37	58	681

Monthly and yearly statistics for previous record (Jun 1968 to Dec 1980—incomplete or missing months total 0.1 years)

Mean	Avg	5.900	7.044	5.843	4.799	3.811	2.597	2.088	1.968	1.596	2.245	3.246	4.487	3.786
flows	Low	2.047	2.174	1.932	2.064	1.851	1.166	0.799	0.621	0.901	1.405	1.465	2.133	1.780
(m ³ s ⁻¹)	High	9.885	12.010	9.553	8.237	7.676	4.411	3.582	3.347	2.148	6.222	9.033	7.049	5.671
Peak flow (m ³ s ⁻¹)		20.50	23.81	23.85	16.03	18.30	6.95	7.03	7.82	4.85	12.23	19.41	16.09	23.85
Runoff (mm)		23	25	22	18	15	10	8	8	6	9	12	17	171
Rainfall (mm)		57	41	46	40	44	49	49	50	49	37	65	57	584

Factors affecting flow regime: GEI
Station type: C
1981 runoff is 122% of previous mean
rainfall 117%

034001 Yare at Colney

1981

Measuring authority AWA
First year 1959
Grid reference TG 182082
Level stn (m OD) 8.18
Catchment area (sq km) 231.8
Max alt (m OD) 69

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	2.943	1.736	4.784	3.442	2.108	0.914	0.875	0.546	0.554	0.952	1.062	1.758	1.802
(m ³ s ⁻¹)	Peak	7.29	3.08	16.90	20.51	5.68	1.46	1.78	0.79	0.93	2.53	1.75	7.68	20.51
Runoff (mm)		34	18	55	38	24	10	10	6	6	11	12	20	246
Rainfall (mm)		61	31	102	104	56	34	75	14	68	83	42	54	724

Monthly and yearly statistics for previous record (Oct 1959 to Dec 1980)

Mean	Avg	2.596	2.750	2.007	1.638	1.058	0.651	0.567	0.571	0.702	0.838	1.514	2.254	1.422
flows	Low	0.779	0.947	0.842	0.623	0.467	0.285	0.189	0.200	0.272	0.330	0.440	0.714	0.770
(m ³ s ⁻¹)	High	5.181	4.931	3.568	3.037	2.487	1.267	1.041	1.607	3.420	2.190	3.971	5.905	2.230
Peak flow (m ³ s ⁻¹)		18.97	18.63	12.01	6.63	10.10	3.46	4.54	6.34	21.61	7.48	11.20	21.15	21.61
Runoff (mm)		30	29	23	18	12	7	7	7	8	10	17	26	194
Rainfall (mm)		57	46	43	46	44	47	56	60	54	56	72	66	647

Factors affecting flow regime: G I
Station type: MIS
1981 runoff is 127% of previous mean
rainfall 112%

034018 Stiffkey at Warham All Saints

1981

Measuring authority AWA
First year 1972
Grid reference TF 944414
Level stn (m OD) 5.30
Catchment area (sq km) 77.1
Max alt (m OD) 95

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.937	0.800	1.228	1.417	0.912	0.522	0.452	0.343	0.337	0.434	0.423	0.536	0.695
(m ³ s ⁻¹)	Peak	2.17	1.54	2.94	10.55	1.50	0.76	1.13	0.65	0.84	1.59	0.85	1.45	10.55
Runoff (mm)		33	25	43	48	32	18	16	12	11	15	14	19	284
Rainfall (mm)		63	34	95	97	57	24	71	24	76	71	46	41	699

Monthly and yearly statistics for previous record (Jan 1976 to Dec 1980—incomplete or missing months total 0.4 years)

Mean	Avg	0.812	1.124	0.747	0.561	0.472	0.395	0.489	0.515	0.278	0.334	0.422	0.636	0.563
flows	Low	0.572	0.454	0.353	0.286	0.227	0.125	0.059	0.083	0.206	0.245	0.285	0.430	0.335
(m ³ s ⁻¹)	High	1.310	2.186	1.031	0.765	0.651	0.617	1.216	0.984	0.339	0.471	0.606	0.864	0.716
Peak flow (m ³ s ⁻¹)		5.47	12.49	4.90	1.05	1.55	1.44	5.76	3.29	0.49	1.26	1.68	2.72	12.49
Runoff (mm)		28	36	26	19	16	13	17	18	9	12	14	22	230
Rainfall (mm)		72	60	59	37	45	50	47	82	41	53	60	81	687

Factors affecting flow regime: G I
Station type: FV
1981 runoff is 123% of previous mean
rainfall 102%

035002 Deben at Naunton Hall**1981**Measuring authority: AWA
First year: 1964Grid reference: TM 327534
Level stn. (m OD) 5.49Catchment area (sq km) 163.1
Max alt. (m OD) 62

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1.575	0.627	3.366	1.677	0.571	0.249	0.211	0.166	0.191	0.409	0.533	1.925	0.954
(m ³ s ⁻¹)	Peak	6.82	5.75	14.80	16.10	1.77	0.70	0.44	0.87	0.66	2.08	3.82	16.11	16.11
Runoff (mm)		26	9	55	26	9	4	3	3	3	7	8	32	186
Rainfall (mm)		49	33	89	73	57	46	54	13	64	72	40	62	652

Monthly and yearly statistics for previous record (Aug 1964 to Dec 1980—incomplete or missing months total 0.6 years)

Mean	Avg	1.755	1.690	1.000	0.651	0.385	0.181	0.168	0.172	0.364	0.396	0.977	1.288	0.747
Flows	Low	0.259	0.247	0.228	0.176	0.107	0.052	0.044	0.054	0.076	0.139	0.173	0.192	0.545
(m ³ s ⁻¹)	High	2.894	4.252	2.004	1.251	1.148	0.326	0.405	0.484	2.825	1.222	3.113	3.585	1.060
Peak flow (m ³ s ⁻¹)		17.78	16.71	13.31	13.49	12.80	1.50	3.39	2.61	29.45	8.24	16.86	14.76	29.45
Runoff (mm)		29	25	16	10	6	3	3	3	6	6	16	21	145
Rainfall (mm)		53	41	41	40	41	43	50	48	58	46	67	55	583

Factors affecting flow regime: R G I
Station type: CC1981 runoff is 128% of previous mean
rainfall 112%**037001 Roding at Redbridge****1981**Measuring authority: TWA
First year: 1950Grid reference: TQ 415884
Level stn. (m OD) 5.72Catchment area (sq km) 303.3
Max alt. (m OD) 117

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1.398	0.825	4.840	2.091	2.507	0.675	0.562	0.650	0.970	1.840	1.800	5.271	1.952
(m ³ s ⁻¹)	Peak	3.65	2.25	17.40	7.74	11.70	3.94	8.27	6.81	4.98	8.68	9.03	25.20	25.20
Runoff (mm)		12	7	43	18	22	6	5	6	8	16	15	47	205
Rainfall (mm)		32	18	94	44	76	28	62	33	98	66	40	66	657

Monthly and yearly statistics for previous record (Feb 1950 to Dec 1980)

Mean	Avg	3.708	3.707	2.749	1.738	1.177	0.791	0.594	0.611	0.900	1.165	2.129	2.801	1.830
Flows	Low	0.675	0.608	0.537	0.482	0.373	0.226	0.280	0.224	0.197	0.283	0.412	0.412	0.801
(m ³ s ⁻¹)	High	7.282	10.670	6.858	4.484	4.045	2.953	1.975	1.315	4.012	6.834	10.340	9.454	2.747
Peak flow (m ³ s ⁻¹)		34.74	30.80	38.08	27.72	32.70	21.70	24.50	19.81	25.62	30.52	62.41	36.40	62.41
Runoff (mm)		33	30	24	15	10	7	5	5	8	10	18	25	190
Rainfall (mm)		51	45	44	42	48	50	52	59	59	53	64	57	622

Factors affecting flow regime: S EI
Station type: EW1981 runoff is 107% of previous mean
rainfall 106%**037005 Colne at Lexden****1981**Measuring authority: AWA
First year: 1959Grid reference: TL 962261
Level stn. (m OD) 8.23Catchment area (sq km) 238.2
Max alt. (m OD) 114

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.962	0.679	3.015	1.338	1.816	0.631	0.431	0.348	0.435	0.785	0.856	2.683	1.165
(m ³ s ⁻¹)	Peak	2.37	2.19	14.49	7.81	7.85	1.64	0.73	1.00	1.00	3.94	4.47	20.58	20.58
Runoff (mm)		11	7	34	15	20	7	5	4	5	9	9	30	155
Rainfall (mm)		28	20	83	49	86	36	44	23	82	63	37	65	616

Monthly and yearly statistics for previous record (Oct 1959 to Dec 1980)

Mean	Avg	1.965	1.911	1.706	1.125	0.723	0.414	0.333	0.315	0.377	0.634	1.149	1.448	1.004
Flows	Low	0.460	0.346	0.380	0.358	0.229	0.146	0.100	0.095	0.179	0.221	0.288	0.352	0.362
(m ³ s ⁻¹)	High	3.737	4.640	3.671	2.451	1.635	0.857	0.687	0.554	1.098	3.930	5.521	4.200	1.732
Peak flow (m ³ s ⁻¹)		13.92	22.02	23.80	13.34	12.56	4.74	4.00	2.38	10.50	7.89	20.34	11.48	23.80
Runoff (mm)		22	20	19	12	8	5	4	4	4	7	13	16	133
Rainfall (mm)		48	37	42	41	40	44	47	51	53	49	61	54	567

Factors affecting flow regime: EI
Station type: FL1981 runoff is 117% of previous mean
rainfall 109%**037008 Chelmer at Springfield****1981**Measuring authority: AWA
First year: 1965Grid reference: TL 713071
Level stn. (m OD) 23.10Catchment area (sq km) 190.3
Max alt. (m OD) 125

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.827	0.549	2.494	1.074	1.322	0.562	0.409	0.358	0.423	0.723	0.714	2.337	0.982
(m ³ s ⁻¹)	Peak	2.08	0.81	11.67	5.09	8.06	1.51	1.41	0.89	1.11	4.42	3.81	20.85	20.85
Runoff (mm)		12	7	35	15	19	8	6	5	6	10	10	33	164
Rainfall (mm)		31	18	86	44	81	31	56	25	88	61	36	64	621

Monthly and yearly statistics for previous record (Dec 1965 to Dec 1980)

Mean	Avg	1.986	2.003	1.590	1.006	0.763	0.458	0.361	0.382	0.442	0.606	1.023	1.516	1.007
Flows	Low	0.395	0.406	0.376	0.378	0.310	0.200	0.183	0.178	0.291	0.264	0.302	0.387	0.348
(m ³ s ⁻¹)	High	3.378	3.891	3.067	1.964	1.972	0.810	0.507	0.705	1.264	2.152	4.536	4.006	1.347
Peak flow (m ³ s ⁻¹)		14.30	26.61	21.75	10.92	18.78	3.95	1.56	3.22	9.75	9.74	25.30	15.43	26.61
Runoff (mm)		28	26	22	14	11	6	5	5	6	9	14	21	167
Rainfall (mm)		51	41	44	39	44	46	43	53	50	45	63	56	575

Factors affecting flow regime: EI
Station type: EW1981 runoff is 98% of previous mean
rainfall 108%

037010 **Blackwater at Appleford Bridge**

1981

Measuring authority: AWA
First year: 1962

Grid reference: TL 845158
Level stn. (m OD): 14.55

Catchment area (sq km): 247.3
Max alt. (m OD): 127

Hydrometric statistics for 1981

Flows	Avg	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
(m ³ s ⁻¹)		0.966	0.687	3.082	1.334	1.606	0.675	0.571	0.471	0.557	0.946	0.983	2.874	1.228
Peak		2.91	1.49	13.00	8.41	7.29	1.64	1.47	0.92	1.22	4.68	4.05	19.00	19.00
Runoff (mm)		10	7	33	14	17	7	6	5	6	10	10	31	158
Rainfall (mm)		30	20	85	46	84	34	51	26	85	63	38	64	626

Monthly and yearly statistics for previous record (Oct 1962 to Dec 1980)

Mean	Avg	1.994	2.110	2.015	1.401	0.970	0.681	0.501	0.457	0.520	0.637	1.108	1.559	1.158
flows		0.532	0.460	0.479	0.479	0.341	0.356	0.182	0.161	0.215	0.296	0.325	0.379	0.822
(m ³ s ⁻¹)	Low													
High		3.916	4.696	3.583	2.698	2.185	1.271	1.007	0.837	1.538	1.955	4.532	4.307	1.627
Peak flow (m ³ s ⁻¹)		14.10	19.00	21.71	11.19	17.80	5.74	2.63	3.28	11.44	8.39	19.60	11.80	21.71
Runoff (mm)		27	21	22	15	11	7	5	5	7	12	17	17	148
Rainfall (mm)		46	37	46	44	43	50	46	52	51	43	62	51	571

Factors affecting flow regime: EI
Station type: FL

1981 runoff is 107% of previous mean
rainfall: 110%

037014 **Roding at High Ongar**

1981

Measuring authority: TWA
First year: 1963

Grid reference: TL 561040
Level stn. (m OD): 41.00

Catchment area (sq km): 95.1
Max alt. (m OD): 183

Hydrometric statistics for 1981

Flows	Avg	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
(m ³ s ⁻¹)		0.760	0.160	1.298	0.476	0.680	0.152	0.056	0.060	0.114	0.326	0.356	1.909	0.487
Peak		0.83	0.32	9.29	2.74	5.66	0.66	0.10	0.24	0.60	1.97	2.20	21.90	21.90
Runoff (mm)		7	4	37	13	19	4	2	3	9	10	10	54	163
Rainfall (mm)		35	18	95	46	78	30	53	38	97	61	38	64	653

Monthly and yearly statistics for previous record (Dec 1963 to Dec 1980)

Mean	Avg	1.168	1.110	0.882	0.444	0.316	0.108	0.049	0.070	0.168	0.225	0.556	0.749	0.484
flows		0.081	0.077	0.066	0.065	0.034	0.015	0.002	0.004	0.013	0.029	0.044	0.065	0.071
(m ³ s ⁻¹)	Low													
High		1.980	2.598	1.982	0.973	1.471	0.791	0.075	0.297	1.320	1.983	4.637	2.745	0.926
Peak flow (m ³ s ⁻¹)		18.50	25.40	15.87	10.69	25.60	2.65	0.30	12.20	20.02	9.25	36.05	17.70	38.06
Runoff (mm)		33	28	25	12	9	3	1	2	5	6	15	21	161
Rainfall (mm)		51	41	48	45	45	50	45	56	50	47	65	55	598

Factors affecting flow regime: G
Station type: EW

1981 runoff is 102% of previous mean
rainfall: 109%

038021 **Turkey Brook at Albany Park**

1981

Measuring authority: TWA
First year: 1971

Grid reference: TQ 359985
Level stn. (m OD): 16.60

Catchment area (sq km): 42.2
Max alt. (m OD): 127

Hydrometric statistics for 1981

Flows	Avg	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
(m ³ s ⁻¹)		0.157	0.043	0.655	0.239	0.327	0.104	0.059	0.062	0.136	0.231	0.168	0.558	0.228
Peak		0.97	0.41	5.08	3.01	4.43	5.17	1.95	2.36	2.51	5.65	2.18	4.58	5.65
Runoff (mm)		10	2	42	15	21	6	4	4	8	15	10	35	172
Rainfall (mm)		37	18	110	48	85	31	79	37	106	69	42	75	737

Monthly and yearly statistics for previous record (Sep 1971 to Dec 1980)

Mean	Avg	0.410	0.453	0.367	0.181	0.197	0.062	0.042	0.053	0.058	0.100	0.220	0.302	0.203
flows		0.037	0.042	0.024	0.020	0.014	0.021	0.013	0.008	0.019	0.016	0.019	0.086	0.057
(m ³ s ⁻¹)	Low													
High		0.760	0.988	0.811	0.626	0.626	0.120	0.087	0.171	0.228	0.410	1.158	0.605	0.339
Peak flow (m ³ s ⁻¹)		10.51	9.74	5.14	6.59	20.69	3.35	2.12	2.08	7.55	4.39	12.75	10.51	20.69
Runoff (mm)		26	26	23	11	13	4	3	4	4	6	14	19	151
Rainfall (mm)		60	51	58	44	52	47	39	52	64	50	63	64	644

Factors affecting flow regime: G
Station type: FV

1981 runoff is 114% of previous mean
rainfall: 114%

039002 **Thames at Days Weir**

1981

Measuring authority: TWA
First year: 1938

Grid reference: SU 568935
Level stn. (m OD): 46.02

Catchment area (sq km): 3444.7
Max alt. (m OD): 330

Hydrometric statistics for 1981

Flows	Avg	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
(m ³ s ⁻¹)		30.780	20.260	88.670	45.500	40.040	26.400	10.660	9.677	11.930	30.270	25.930	46.200	32.193
Peak														
Runoff (mm)		24	14	69	34	31	20	8	8	9	24	20	36	286
Rainfall (mm)		38	28	128	48	93	33	39	55	127	73	40	82	784

Monthly and yearly statistics for previous record (Oct 1938 to Dec 1980)

Mean	Avg	55.500	58.910	46.070	30.250	19.990	14.100	8.671	7.359	9.063	15.350	31.900	44.980	28.357
flows		6.250	5.554	5.620	4.253	2.855	1.502	0.399	0.296	1.741	2.778	4.040	5.312	10.095
(m ³ s ⁻¹)	Low													
High		133.600	120.800	163.200	85.070	41.930	41.560	48.820	18.690	38.630	74.570	128.100	128.700	51.292
Peak flow (m ³ s ⁻¹)														
Runoff (mm)		43	42	36	23	16	11	7	6	7	12	24	35	260
Rainfall (mm)		67	49	51	46	58	54	55	70	60	62	72	68	712

Factors affecting flow regime: P EI
Station type: MIS

1981 runoff is 114% of previous mean
rainfall: 110%

039011 Wey at Tilford**1981**Measuring authority: TWA
First year: 1954Grid reference: SU 874433
Level stn. (m OD) 48.20Catchment area (sq km): 396.3
Max alt. (m OD) 280**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	2.732	2.311	5.670	3.262	3.581	2.882	1.973	1.877	2.707	3.769	2.897	4.693	3.196
(m ³ s ⁻¹)	Peak	4.37	4.22	17.30	7.94	18.90	19.30	3.91	5.67	15.10	13.20	6.36	15.50	19.30
Runoff (mm)		18	14	38	21	24	19	13	13	18	25	19	32	255
Rainfall (mm)		43	32	159	45	110	47	62	30	169	104	45	107	953

Monthly and yearly statistics for previous record (Oct 1954 to Dec 1980)

Mean	Avg	5.339	4.736	4.231	3.671	3.437	2.641	2.059	1.912	2.270	2.800	3.864	4.493	3.444
flows	Low	1.808	1.954	1.662	1.524	1.400	1.214	1.089	0.885	0.905	1.327	1.261	1.898	1.696
(m ³ s ⁻¹)	High	9.943	9.423	7.083	5.902	5.884	6.084	3.220	3.081	7.383	9.631	11.590	9.745	5.267
Peak flow (m ³ s ⁻¹)		43.10	42.60	41.60	26.00	31.30	36.00	34.60	12.40	79.00	44.50	38.70	52.10	79.00
Runoff (mm)		36	29	29	24	23	17	14	13	15	19	25	30	274
Rainfall (mm)		91	59	63	52	61	53	61	70	81	79	94	94	858

Factors affecting flow regime: G
Station type: C1981 runoff is 93% of previous mean
rainfall 111%**039014 Ver at Hansteads****1981**Measuring authority: TWA
First year: 1956Grid reference: TL 151016
Level stn. (m OD) 61.34Catchment area (sq km): 132.0
Max alt. (m OD) 243**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.288	0.235	0.416	0.372	0.408	0.360	0.252	0.274	0.732	0.782	0.278	0.350	0.312
(m ³ s ⁻¹)	Peak	0.65	0.41	0.97	0.85	0.93	1.06	0.66	0.58	0.73	1.09	0.86	0.70	1.09
Runoff (mm)		6	4	8	7	8	7	5	6	5	6	5	7	75
Rainfall (mm)		41	19	121	55	88	38	64	40	100	74	47	69	756

Monthly and yearly statistics for previous record (Oct 1956 to Dec 1980)

Mean	Avg	0.491	0.565	0.602	0.576	0.509	0.435	0.377	0.336	0.299	0.310	0.370	0.421	0.440
flows	Low	0.126	0.190	0.138	0.114	0.069	0.045	0.028	0.016	0.025	0.057	0.039	0.048	0.095
(m ³ s ⁻¹)	High	0.981	1.336	1.312	1.254	1.028	0.857	0.652	0.564	0.660	0.668	0.791	0.977	0.752
Peak flow (m ³ s ⁻¹)		1.77	1.91	1.88	1.90	2.07	1.65	1.44	1.13	2.34	1.35	2.31	2.64	2.64
Runoff (mm)		10	10	12	11	10	9	8	7	6	6	7	9	105
Rainfall (mm)		63	50	55	50	51	58	54	60	62	62	67	74	706

Factors affecting flow regime: G
Station type: CC1981 runoff is 71% of previous mean
rainfall 107%**039016 Kennet at Theale****1981**Measuring authority: TWA
First year: 1961Grid reference: SU 649708
Level stn. (m OD) 43.37Catchment area (sq km): 1033.4
Max alt. (m OD) 297**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	8.355	7.927	17.100	15.890	14.670	12.260	9.154	7.163	7.085	8.445	8.306	12.370	10.727
(m ³ s ⁻¹)	Peak	10.50	9.45	29.40	25.50	20.00	17.40	11.40	13.60	27.20	15.90	13.80	25.80	29.40
Runoff (mm)		22	19	44	40	38	31	24	19	18	22	21	32	328
Rainfall (mm)		37	32	162	44	94	39	58	32	132	87	49	102	868

Monthly and yearly statistics for previous record (Oct 1961 to Dec 1980)

Mean	Avg	12.590	14.500	14.670	12.580	10.210	8.453	6.407	5.755	5.375	6.023	7.974	9.940	9.513
flows	Low	4.144	4.401	4.190	3.429	2.739	2.041	1.620	1.377	2.787	3.897	3.943	5.159	4.056
(m ³ s ⁻¹)	High	22.680	27.720	22.010	19.790	15.430	18.600	11.120	9.542	10.000	13.970	17.710	18.240	12.882
Peak flow (m ³ s ⁻¹)		48.30	44.80	44.30	31.70	30.10	20.80	19.00	19.40	33.40	29.40	43.50	47.30	70.80
Runoff (mm)		33	34	38	32	26	21	17	15	13	16	20	26	290
Rainfall (mm)		73	53	66	52	61	63	49	71	67	61	75	79	770

Factors affecting flow regime: R G I
Station type: C1981 runoff is 113% of previous mean
rainfall 113%**039019 Lambourn at Shaw****1981**Measuring authority: TWA
First year: 1962Grid reference: SU 470682
Level stn. (m OD) 75.59Catchment area (sq km): 234.1
Max alt. (m OD) 261**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1.627	1.721	2.248	2.925	2.881	2.764	2.310	1.798	1.471	1.488	1.562	1.897	2.058
(m ³ s ⁻¹)	Peak	1.94	1.90	2.91	3.54	3.40	3.14	2.81	3.20	2.38	1.92	2.08	3.06	3.54
Runoff (mm)		19	18	26	32	33	31	26	21	16	17	17	22	277
Rainfall (mm)		34	29	161	47	102	35	63	34	124	85	47	108	869

Monthly and yearly statistics for previous record (Oct 1962 to Dec 1980)

Mean	Avg	1.625	2.074	2.431	2.402	2.120	1.827	1.507	1.296	1.177	1.156	1.237	1.391	1.684
flows	Low	0.876	0.796	0.743	0.695	0.639	0.573	0.538	0.485	0.681	0.683	0.757	0.855	0.739
(m ³ s ⁻¹)	High	3.410	3.618	3.583	3.550	2.979	2.607	2.359	2.048	1.699	1.921	2.392	2.551	2.151
Peak flow (m ³ s ⁻¹)		3.93	4.20	4.39	4.08	3.76	4.34	3.06	3.54	3.75	3.17	5.07	3.72	5.02
Runoff (mm)		19	27	28	27	24	20	17	15	13	13	14	18	227
Rainfall (mm)		66	52	64	50	60	62	50	68	62	56	74	74	738

Factors affecting flow regime: R G
Station type: C1981 runoff is 122% of previous mean
rainfall 118%

039022 Loddon at Sheepbridge

1981

Measuring authority TWA
First year 1965
Grid reference SU 720652
Level stn (m OD) 42.36
Catchment area (sq km): 164.5
Max alt (m OD) 225

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	2 065	1 642	4 216	2 378	2 296	1 796	1 282	1 205	1 474	2 058	1 998	3 575	2 165
(m ³ s ⁻¹)	Peak	3 33	2 55	11 90	7 47	10 60	6 94	1 78	2 68	7 18	7 00	4 08	14 50	14 50
Runoff (mm)		34	24	69	37	37	28	21	20	23	34	31	58	417
Rainfall (mm)		40	25	139	44	93	40	59	33	140	82	45	94	834

Monthly and yearly statistics for previous record (Oct 1965 to Dec 1980)

Mean	Avg	3 300	3 330	2 919	2 359	2 067	1 646	1 242	1 198	1 310	1 547	2 098	2 660	2 134
flows	Low	1 230	1 266	1 160	0 988	0 873	0 730	0 661	0 590	0 777	0 839	0 863	1 225	1 207
(m ³ s ⁻¹)	High	5 366	5 067	4 495	4 026	3 433	4 166	1 563	1 544	3 487	3 021	5 989	4 348	2 599
Peak flow (m ³ s ⁻¹)		22 40	21 70	16 40	13 70	14 90	24 90	3 55	6 58	26 40	14 30	22 70	16 80	26 40
Runoff (mm)		54	49	48	37	34	26	20	20	21	25	33	43	409
Rainfall (mm)		77	60	59	49	60	55	49	62	67	62	80	78	759

Factors affecting flow regime GEI
Station type C
1981 runoff is 102% of previous mean
rainfall 110%

039023 Wye at Hedsor

1981

Measuring authority TWA
First year 1964
Grid reference SU 896867
Level stn (m OD) 26.82
Catchment area (sq km): 137.3
Max alt (m OD) 244

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0 905	0 926	1 195	1 214	1 286	1 356	1 261	1 314	1 176	1 121	1 035	1 100	1 167
(m ³ s ⁻¹)	Peak	1 64	1 29	1 90	1 86	2 15	2 74	2 60	4 17	4 43	2 73	2 23	1 63	4 43
Runoff (mm)		18	16	23	23	25	26	25	26	27	22	20	21	266
Rainfall (mm)		54	23	133	55	109	39	50	57	121	85	45	88	859

Monthly and yearly statistics for previous record (Dec 1964 to Dec 1980)

Mean	Avg	0 897	1 003	1 103	1 148	1 137	1 086	0 988	0 943	0 849	0 797	0 801	0 828	0 965
flows	Low	0 419	0 484	0 488	0 470	0 432	0 380	0 370	0 314	0 381	0 395	0 375	0 340	0 442
(m ³ s ⁻¹)	High	1 506	1 675	1 800	1 891	1 842	1 531	1 434	1 317	1 182	1 180	1 329	1 260	1 365
Peak flow (m ³ s ⁻¹)		3 04	2 76	3 21	3 26	3 10	2 94	2 94	3 79	3 13	2 87	2 79	2 85	3 79
Runoff (mm)		17	18	22	22	22	21	19	18	16	16	15	16	222
Rainfall (mm)		71	55	58	52	61	63	60	70	68	59	70	77	764

Factors affecting flow regime G1
Station type C
1981 runoff is 120% of previous mean
rainfall 112%

039026 Cherwell at Banbury

1981

Measuring authority TWA
First year 1966
Grid reference SP 458411
Level stn (m OD) 88.85
Catchment area (sq km): 199.4
Max alt (m OD) 227

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1 561	0 957	3 919	1 737	1 245	0 757	0 161	0 980	0 833	1 523	1 095	2 382	1 428
(m ³ s ⁻¹)	Peak	8 01	6 24	14 70	12 00	5 64	9 06	0 34	17 20	7 25	9 00	3 53	24 00	24 00
Runoff (mm)		21	12	53	23	17	10	2	13	11	20	14	37	227
Rainfall (mm)		44	31	105	54	86	30	23	107	127	73	36	61	777

Monthly and yearly statistics for previous record (Dec 1966 to Dec 1980)

Mean	Avg	2 537	2 633	2 097	0 892	0 798	0 435	0 276	0 382	0 237	0 432	0 809	1 897	1 113
flows	Low	0 074	0 049	0 031	0 012	0 010	0 008	0 004	0 009	0 016	0 013	0 018	0 056	0 269
(m ³ s ⁻¹)	High	5 019	5 320	4 781	2 030	2 076	1 434	1 869	1 343	1 532	1 715	2 828	3 967	1 672
Peak flow (m ³ s ⁻¹)		73 60	45 90	46 40	8 86	11 20	16 90	27 20	7 91	7 08	8 47	18 20	54 10	64 10
Runoff (mm)		34	32	28	12	11	6	4	5	3	6	11	25	178
Rainfall (mm)		67	50	67	36	53	64	57	71	51	45	58	68	682

Factors affecting flow regime P
Station type CC
1981 runoff is 129% of previous mean
rainfall 114%

039049 Silk Stream at Colindeep Lane

1981

Measuring authority GLC
First year 1973
Grid reference TQ 217895
Level stn (m OD) 39.90
Catchment area (sq km): 29.0
Max alt (m OD) 146

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0 204	0 102	0 613	0 265	0 408	0 163	0 187	0 200	0 276	0 376	0 233	0 422	0 287
(m ³ s ⁻¹)	Peak	1 95												
Runoff (mm)		19	8	57	24	38	15	17	18	25	35	21	39	315
Rainfall (mm)		35	16	113	45	91	40	63	37	106	77	43	74	740

Monthly and yearly statistics for previous record (Dec 1973 to Dec 1980—incomplete or missing months total 4.0 years)

Mean	Avg	0 363	0 416	0 435	0 267	0 236	0 179	0 130	0 105	0 071	0 278	0 465	0 311	0 271
flows	Low	0 200	0 353	0 197	0 030	0 035	0 105	0 047	0 079	0 057	0 154	0 143	0 143	0 216
(m ³ s ⁻¹)	High	0 564	0 474	0 677	0 573	0 584	0 280	0 213	0 120	0 086	0 350	1 086	0 659	0 216
Peak flow (m ³ s ⁻¹)		9 00	4 85	8 89	10 26	11 80	7 59	16 53	10 11	3 83	16 56	24 27	36 31	38 31
Runoff (mm)		34	35	40	24	22	16	12	10	6	28	42	29	295
Rainfall (mm)		59	50	60	43	55	53	38	56	70	59	62	68	673

Factors affecting flow regime:
Station type: FV
1981 runoff is 107% of previous mean
rainfall 110%

039069 Mole at Kinnersley Manor**1981**Measuring authority: TWA
First year: 1972Grid reference: TQ 262462
Level stn. (m OD) 48.00Catchment area (sq km): 142.0
Max alt. (m OD): 178**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1 434	0 830	4 668	1 611	3 230	1 276	0 432	0 979	2 061	2 912	1 865	4 340	2 138
(m ³ s ⁻¹)	Peak	3 32	2 42	17 40	10 30	28 40	17 70	1 60	26 10	18 40	16 20	11 20	30 00	30 00
Runoff (mm)		27	14	88	29	61	23	8	18	38	55	34	82	478
Rainfall (mm)														

Monthly and yearly statistics for previous record (Dec 1972 to Dec 1980—incomplete or missing months total 1.5 years)

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Mean	Avg	3 627	3 647	2 429	1 447	1 489	0 892	0 642	0 680	1 201	1 153	2 078	3 431	1 885
flows	Low	1 364	1 302	0 833	0 388	0 305	0 221	0 296	0 169	0 281	0 207	0 260	1 100	0 850
(m ³ s ⁻¹)	High	5 578	5 883	4 082	3 397	3 552	1 874	1 709	1 763	5 419	2 644	5 668	5 474	2 244
Peak flow (m ³ s ⁻¹)		41 30	46 50	20 10	47 00	32 90	23 30	14 90	29 80	40 70	23 90	56 10	68 50	68 50
Runoff (mm)		68	62	46	26	28	16	12	13	22	22	38	65	419
Rainfall (mm)														

Factors affecting flow regime:
Station type: MIS

1981 runoff is 114% of previous mean

040003 Medway at Teston**1981**Measuring authority: SWA
First year: 1956Grid reference: TQ 708530
Level stn. (m OD) 7.01Catchment area (sq km): 1256.1
Max alt. (m OD): 267**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	7 560	5 259	25 040	9 096	13 040	5 286	3 055	3 836	8 708	15 420	10 000	27 060	11 113
(m ³ s ⁻¹)	Peak													
Runoff (mm)		16	10	53	19	28	11	7	8	18	33	21	58	281
Rainfall (mm)		31	19	113	31	95	41	45	40	134	101	44	92	786

Monthly and yearly statistics for previous record (Oct 1956 to Dec 1980—incomplete or missing months total 1.5 years)

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Mean	Avg	22 800	20 870	14 790	10 070	6 729	4 705	2 880	3 217	5 385	6 934	16 430	19 030	11 102
flows	Low	4 910	5 628	3 382	2 326	1 749	1 139	1 116	0 577	1 066	1 402	2 341	4 362	7 584
(m ³ s ⁻¹)	High	45 370	49 150	31 600	21 370	20 820	21 690	7 550	7 888	30 090	37 860	66 830	37 330	19 327
Peak flow (m ³ s ⁻¹)		167 50	148 70	169 30	105 90	58 90	128 60	23 82	60 60	86 93	154 00	294 50	202 50	284 50
Runoff (mm)		49	41	32	21	14	10	6	7	11	15	34	41	279
Rainfall (mm)		72	54	54	49	51	55	55	61	73	68	84	81	757

Factors affecting flow regime: S PG
Station type: MIS1981 runoff is 101% of previous mean
rainfall 104%**040004 Rother at Udiam****1981**Measuring authority: SWA
First year: 1962Grid reference: TQ 773245
Level stn. (m OD) 1.94Catchment area (sq km): 206.0
Max alt. (m OD): 197**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1 270	0 792	5 434	1 907	2 567	1 029	0 512	0 619	1 724	3 990	2 292	4 577	2 226
(m ³ s ⁻¹)	Peak	2 85	2 78	19 26	6 05	11 92	3 47	2 11	8 04	15 57	14 15	11 56	21 02	21 02
Runoff (mm)		17	9	71	24	33	13	7	8	22	52	29	60	343
Rainfall (mm)		29	27	148	39	100	50	44	31	149	135	48	99	899

Monthly and yearly statistics for previous record (Oct 1962 to Dec 1980—incomplete or missing months total 1.8 years)

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Mean	Avg	3 563	3 745	3 164	2 176	1 376	1 079	0 499	0 604	0 932	1 307	3 080	3 227	2 053
flows	Low	0 945	0 919	0 657	0 343	0 338	0 268	0 231	0 182	0 245	0 179	0 184	0 427	0 756
(m ³ s ⁻¹)	High	6 957	10 370	6 927	4 533	2 433	4 157	0 834	1 823	3 952	5 708	12 360	9 547	3 322
Peak flow (m ³ s ⁻¹)		37 96	44 74	49 84	25 43	24 09	23 08	12 74	14 36	33 98	29 17	50 43	51 82	51 82
Runoff (mm)		46	44	41	27	18	14	6	8	12	17	39	42	314
Rainfall (mm)		87	68	68	57	57	66	53	65	79	74	103	87	859

Factors affecting flow regime: S GE
Station type: VA1981 runoff is 109% of previous mean
rainfall 105%**040009 Teise at Stone Bridge****1981**Measuring authority: SWA
First year: 1961Grid reference: TQ 718399
Level stn. (m OD) 24.50Catchment area (sq km): 136.2
Max alt. (m OD): 201**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0 897	0 940	2 480	1 203	1 542	0 875	0 834	0 949	1 486	1 844	1 249	2 979	1 440
(m ³ s ⁻¹)	Peak	1 66	2 71	21 24	4 09	8 56	2 09	1 42	10 40	15 58	7 90	7 95	19 72	21 24
Runoff (mm)		18	17	49	23	30	17	16	19	28	36	24	59	335
Rainfall (mm)		30	22	133	37	98	44	51	39	157	111	45	97	864

Monthly and yearly statistics for previous record (Oct 1961 to Dec 1980—incomplete or missing months total 0.2 years)

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Mean	Avg	2 491	2 278	1 948	1 397	1 065	0 770	0 451	0 438	0 619	0 896	1 813	1 930	1 337
flows	Low	0 553	0 522	0 413	0 323	0 239	0 130	0 231	0 100	0 170	0 128	0 276	0 471	0 559
(m ³ s ⁻¹)	High	5 757	6 241	3 928	2 781	2 306	2 628	0 977	1 021	2 359	3 173	6 344	5 334	2 101
Peak flow (m ³ s ⁻¹)		41 63	48 27	34 43	24 78	38 95	29 22	13 87	10 61	23 88	29 17	47 12	48 29	48 29
Runoff (mm)		49	41	38	27	21	15	9	9	12	18	35	38	310
Rainfall (mm)		76	58	64	53	56	59	49	60	75	68	91	82	791

Factors affecting flow regime: PGE
Station type: B VA1981 runoff is 108% of previous mean
rainfall 109%

041001 Nunningham Stream at Tilley Bridge**1981**Measuring authority SWA
First year 1950Grid reference TQ 662129
Level stn. (m OD) 3.80Catchment area (sq km) 16.9
Max alt. (m OD) 137**Hydrometric statistics for 1981**

Flows	Avg	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
(m ³ s ⁻¹)	Peak	0.115	0.100	0.562	0.228	0.168	0.072	0.033	0.018	0.061	0.439	0.238	0.508	0.212
Runoff (mm)		0.67	0.67	4.97	1.04	1.52	0.34	0.10	0.04	1.30	6.77	4.88	8.67	8.67
Rainfall (mm)		18	14	89	35	27	11	5	3	9	70	36	80	398
		27	26	127	38	95	51	28	33	170	150	44	91	830

Monthly and yearly statistics for previous record (Apr 1950 to Dec 1980)

Mean	Avg	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
flows	Low	0.403	0.350	0.239	0.140	0.080	0.055	0.035	0.042	0.059	0.114	0.308	0.334	0.178
(m ³ s ⁻¹)	High	0.076	0.094	0.054	0.034	0.023	0.012	0.011	0.008	0.009	0.013	0.019	0.033	0.053
Peak flow (m ³ s ⁻¹)		0.865	0.958	0.577	0.295	0.195	0.319	0.210	0.125	0.359	0.576	1.017	1.082	0.306
Runoff (mm)		8.82	8.60	8.49	5.94	6.20	7.92	1.89	9.32	8.92	8.82	11.90	8.84	11.90
Rainfall (mm)		64	50	38	21	13	8	5	7	9	18	47	53	334
		79	73	60	54	55	61	58	73	78	75	98	90	854

Factors affecting flow regime N
Station type MIS1981 runoff is 119% of previous mean
rainfall 97%**041005 Ouse at Gold Bridge****1981**Measuring authority SWA
First year 1960Grid reference TQ 429214
Level stn. (m OD) 11.43Catchment area (sq km) 180.9
Max alt. (m OD) 203**Hydrometric statistics for 1981**

Flows	Avg	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
(m ³ s ⁻¹)	Peak	1.916	1.442	6.888	2.475	3.215	1.556	0.714	0.949	2.536	3.979	2.716	4.749	2.761
Runoff (mm)		3.35	3.19	29.10	8.67	10.35	9.50	1.99	101.70	112.00	9.92	9.40	109.30	112.00
Rainfall (mm)		28	19	107	35	48	22	11	14	36	59	39	70	484
		33	26	147	38	111	40	39	68	175	113	46	93	929

Monthly and yearly statistics for previous record (Mar 1960 to Dec 1980)

Mean	Avg	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
flows	Low	4.209	3.733	2.911	2.201	1.684	1.071	0.618	0.674	1.075	1.601	3.539	3.393	2.217
(m ³ s ⁻¹)	High	1.142	1.240	0.793	0.611	0.451	0.283	0.217	0.157	0.230	0.275	0.384	0.846	0.934
Peak flow (m ³ s ⁻¹)		7.762	8.214	5.672	4.318	3.657	3.829	1.903	2.088	4.296	6.602	12.030	7.657	3.261
Runoff (mm)		46.80	71.85	29.86	31.57	26.35	27.91	16.52	33.15	49.01	47.59	86.92	81.06	86.92
Rainfall (mm)		62	50	43	32	25	15	9	10	15	24	51	50	387
		87	62	64	61	59	64	55	67	85	79	106	89	878

Factors affecting flow regime SRPGE
Station type CBVA1981 runoff is 125% of previous mean
rainfall 106%**041006 Uck at Isfield****1981**Measuring authority SWA
First year 1964Grid reference TQ 459190
Level stn. (m OD) 11.28Catchment area (sq km) 87.8
Max alt. (m OD) 221**Hydrometric statistics for 1981**

Flows	Avg	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
(m ³ s ⁻¹)	Peak	0.776	0.643	3.317	1.016	1.403	0.589	0.365	0.400	1.790	1.904	1.219	2.936	1.383
Runoff (mm)		1.87	1.43	39.12	3.48	9.44	2.11	1.21	10.72	36.40	16.08	7.60	47.49	47.49
Rainfall (mm)		24	18	101	30	43	17	11	12	53	58	36	90	493
		29	25	135	37	104	42	44	37	156	123	42	94	868

Monthly and yearly statistics for previous record (Oct 1964 to Dec 1980)

Mean	Avg	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
flows	Low	2.059	2.010	1.289	1.014	0.724	0.506	0.353	0.318	0.546	0.736	1.540	1.766	1.066
(m ³ s ⁻¹)	High	0.579	0.627	0.413	0.324	0.252	0.170	0.142	0.106	0.170	0.160	0.211	0.342	0.480
Peak flow (m ³ s ⁻¹)		4.030	4.195	2.385	2.162	1.420	1.657	1.489	0.827	2.868	2.577	6.536	4.034	1.945
Runoff (mm)		40.75	75.63	31.96	23.68	22.86	29.59	46.63	9.72	35.86	37.31	84.43	55.58	75.63
Rainfall (mm)		63	56	39	30	22	15	11	10	16	27	45	54	383
		83	67	61	50	55	69	53	65	78	70	95	85	831

Factors affecting flow regime E
Station type C1981 runoff is 129% of previous mean
rainfall 104%**041025 Loxwood Stream at Drungewick****1981**Measuring authority SWA
First year 1972Grid reference TQ 060309
Level stn. (m OD) 13.15Catchment area (sq km) 91.6
Max alt. (m OD) 260**Hydrometric statistics for 1981**

Flows	Avg	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
(m ³ s ⁻¹)	Peak	0.810	0.419	3.832	1.639	2.527	1.334	0.096	0.488	1.704	1.901	0.881	2.843	1.488
Runoff (mm)		2.21	2.75	21.38	27.33	27.54	36.90	0.15	19.38	25.29	17.68	4.17	30.86	36.90
Rainfall (mm)		24	11	112	46	74	38	3	14	34	56	25	83	520
		34	26	134	52	113	50	43	58	153	100	44	92	899

Monthly and yearly statistics for previous record (Jan 1972 to Dec 1980—incomplete or missing months total 0.1 years)

Mean	Avg	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
flows	Low	2.362	1.948	1.525	0.870	0.711	0.176	0.112	0.156	0.509	0.781	1.283	2.334	1.061
(m ³ s ⁻¹)	High	0.266	0.375	0.196	0.116	0.078	0.041	0.032	0.018	0.043	0.044	0.062	0.618	0.311
Peak flow (m ³ s ⁻¹)		4.264	3.497	3.133	2.680	2.799	0.469	0.227	0.685	2.470	2.641	4.748	4.536	1.493
Runoff (mm)		34.88	36.49	31.33	41.61	32.73	4.07	5.66	22.48	36.44	35.26	34.58	56.75	56.75
Rainfall (mm)		69	52	45	25	21	5	3	5	14	23	36	68	366
		88	59	67	46	54	60	49	57	77	71	78	92	798

(1971:1980)

Factors affecting flow regime N
Station type CC1981 runoff is 142% of previous mean
rainfall 113%

042003 Lymington at Brockenhurst Park**1981**Measuring authority: SWA
First year: 1960Grid reference: SU 318019
Level stn. (m OD) 6.10Catchment area (sq km) 98.9
Max alt. (m OD) 114**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.849	1.182	3.089	1.169	1.484	0.709	0.257	0.135	0.872	1.454	0.862	1.883	1.162
(m ³ s ⁻¹)	Peak	2.97	8.11	8.44	8.32	8.07	6.85	5.10	1.95	8.47	8.24	4.11	8.33	8.47
Runoff (mm)		23	29	84	31	40	19	7	4	23	39	23	51	371
Rainfall (mm)		30	48	146	46	91	42	58	9	171	85	39	104	869

Monthly and yearly statistics for previous record (Oct 1960 to Dec 1980—incomplete or missing months total 0.2 years)

Mean	Avg	1.871	1.807	1.385	0.991	0.805	0.448	0.258	0.290	0.498	1.033	1.478	1.520	1.024
Flows	Low	0.330	0.439	0.327	0.168	0.128	0.047	0.013	0.014	0.084	0.128	0.198	0.541	0.407
(m ³ s ⁻¹)	High	3.723	3.459	2.957	2.169	1.569	1.247	1.603	0.847	2.308	4.841	5.283	3.294	1.340
Peak flow (m ³ s ⁻¹)		9.91	13.62	8.64	7.85	13.98	7.85	11.38	8.16	4.16	11.28	13.54	14.91	14.91
Runoff (mm)		51	45	38	26	22	12	7	8	13	28	37	41	327
Rainfall (mm)		91	63	65	53	61	57	43	66	77	81	95	89	841

Factors affecting flow regime: N
Station type: VN1981 runoff is 114% of previous mean
rainfall 103%**042006 Meon at Mislingford****1981**Measuring authority: SWA
First year: 1958Grid reference: SU 589141
Level stn. (m OD) 29.33Catchment area (sq km) 72.8
Max alt. (m OD) 233**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.990	0.841	1.848	1.988	1.381	1.120	0.800	0.501	0.443	0.905	1.181	1.330	1.111
(m ³ s ⁻¹)	Peak	1.21	1.17	2.58	2.83	1.93	1.50	1.18	0.77	0.96	1.50	1.41	1.98	2.83
Runoff (mm)		36	28	68	71	51	40	29	18	16	33	42	49	482
Rainfall (mm)		45	48	181	47	124	39	48	20	191	123	45	113	1024

Monthly and yearly statistics for previous record (Oct 1958 to Dec 1980)

Mean	Avg	1.493	1.812	1.678	1.353	1.023	0.741	0.535	0.407	0.366	0.546	0.861	1.112	0.989
Flows	Low	0.463	0.480	0.427	0.335	0.164	0.120	0.079	0.068	0.102	0.110	0.124	0.186	0.334
(m ³ s ⁻¹)	High	3.470	3.300	2.820	1.878	1.738	1.220	0.827	0.657	0.882	2.309	4.126	3.917	1.807
Peak flow (m ³ s ⁻¹)		3.25	4.02	3.26	2.55	2.06	1.42	1.16	1.08	0.96	0.72	2.83	2.59	4.02
Runoff (mm)		55	61	62	48	38	26	20	15	13	20	31	41	429
Rainfall (mm)		99	64	71	59	64	60	55	74	83	86	104	101	920

Factors affecting flow regime: G
Station type: FL1981 runoff is 112% of previous mean
rainfall 111%**042008 Cheriton Stream at Swards Bridge****1981**Measuring authority: SWA
First year: 1970Grid reference: SU 574323
Level stn. (m OD) 55.80Catchment area (sq km) 75.1
Max alt. (m OD) 234**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.592	0.529	0.824	1.000	0.813	0.698	0.564	0.483	0.452	0.672	0.701	0.741	0.672
(m ³ s ⁻¹)	Peak	0.69	0.64	1.02	1.28	1.09	0.82	0.73	0.66	0.77	0.89	0.85	0.95	1.28
Runoff (mm)		21	17	29	35	29	24	20	17	16	24	24	26	283
Rainfall (mm)		45	39	177	48	108	40	78	21	180	109	51	109	1005

Monthly and yearly statistics for previous record (Jul 1970 to Dec 1980—incomplete or missing months total 0.1 years)

Mean	Avg	0.772	0.958	0.919	0.812	0.664	0.555	0.428	0.404	0.375	0.402	0.500	0.664	0.619
Flows	Low	0.521	0.495	0.409	0.320	0.271	0.218	0.183	0.165	0.207	0.279	0.278	0.320	0.408
(m ³ s ⁻¹)	High	1.729	1.443	1.410	1.065	0.857	0.959	0.532	0.708	0.560	0.561	0.980	1.169	0.761
Peak flow (m ³ s ⁻¹)		1.36	1.83	1.68	1.39	1.26	2.02	1.25	1.28	0.76	0.64	1.23	1.20	2.02
Runoff (mm)		28	31	33	28	24	19	15	14	13	14	17	24	260
Rainfall (mm)		101	71	73	46	56	60	55	65	76	68	103	98	872

Factors affecting flow regime: N
Station type: C1981 runoff is 109% of previous mean
rainfall 115%**042012 Anton at Fullerton****1981**Measuring authority: SWA
First year: 1973Grid reference: SU 379393
Level stn. (m OD) 40.51Catchment area (sq km) 185.0
Max alt. (m OD) 253**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1.671	1.637	2.236	2.500	2.237	2.147	1.669	1.480	1.536	1.888	1.918	2.155	1.923
(m ³ s ⁻¹)	Peak													
Runoff (mm)		24	21	32	35	32	30	24	21	22	27	27	31	328
Rainfall (mm)		41	39	159	41	86	42	53	17	161	78	48	110	875

Monthly and yearly statistics for previous record (Jan 1975 to Dec 1980)

Mean	Avg	2.113	2.502	2.564	2.496	2.145	1.836	1.524	1.356	1.263	1.305	1.396	1.668	1.843
Flows	Low	1.301	1.215	1.047	0.948	0.830	0.691	0.676	0.548	0.688	1.015	1.003	1.417	1.010
(m ³ s ⁻¹)	High	2.907	3.691	3.382	3.135	2.842	2.817	2.196	1.784	1.498	1.544	1.687	1.896	2.200
Peak flow (m ³ s ⁻¹)		3.55	2.89	2.90	2.81	2.96	2.56	2.18	2.27	1.67	1.81	2.14	2.27	3.55
Runoff (mm)		31	33	37	35	31	26	22	20	18	19	20	24	314
Rainfall (mm)		76	61	79	37	54	46	46	68	56	62	61	104	750

Factors affecting flow regime: N
Station type: C1981 runoff is 104% of previous mean
rainfall 117%

043007 Stour at Throop Mill

1981

Measuring authority WWA
First year 1972

Grid reference SZ 113958
Level stn (m OD) 4 35

Catchment area (sq km) 1073 0
Max alt (m OD) 277

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	13 620	10 540	32 460	14 780	13 400	8 972	5 417	4 140	5 721	13 290	12 100	31 400	13 820
(m ³ s ⁻¹)	Peak	36 29	39 83	90 87	24 82	35 67	18 48	10 24	5 80	18 79	27 70	23 51	91 69	91 69
Runoff (mm)		34	24	81	36	33	22	14	10	14	33	29	78	408
Rainfall (mm)		44	49	143	41	96	41	57	13	148	89	47	124	892

Monthly and yearly statistics for previous record (Jan 1973 to Dec 1980)

Mean	Avg	23 570	28 460	21 650	13 200	9 528	6 652	4 269	4 650	6 132	9 388	12 460	21 540	13 388
Flows	Low	4 319	6 876	7 548	4 483	3 157	2 231	1 614	1 358	2 455	2 716	2 823	6 386	6 138
(m ³ s ⁻¹)	High	35 150	42 200	12 620	22 660	18 900	16 410	6 141	8 998	20 340	29 770	36 370	40 270	17 377
Peak flow (m ³ s ⁻¹)		116 60	131 50	85 58	61 56	161 20	159 20	13 81	32 41	90 33	101 90	131 40	190 70	180 70
Runoff (mm)		59	65	54	32	24	16	11	12	15	23	30	54	394
Rainfall (mm)		88	82	77	36	59	56	52	69	86	72	78	108	863

Factors affecting flow regime I
Station type CC

1981 runoff is 104% of previous mean
rainfall 103%

044002 Piddle at Baggs Mill

1981

Measuring authority WWA
First year 1963

Grid reference SY 913876
Level stn (m OD) 2 06

Catchment area (sq km) 183 1
Max alt (m OD) 275

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	2 387	2 214	5 344	4 337	2 933	2 329	1 682	1 180	1 361	2 147	2 247	3 213	2 615
(m ³ s ⁻¹)	Peak	2 77	4 57	8 26	5 50	3 51	3 38	2 07	1 61	4 19	3 77	3 75	6 05	8 26
Runoff (mm)		35	29	78	61	43	33	25	17	19	31	32	47	451
Rainfall (mm)		44	65	176	51	115	48	56	11	195	114	54	133	1062

Monthly and yearly statistics for previous record (Oct 1963 to Dec 1980)

Mean	Avg	3 550	4 522	3 999	2 944	2 165	1 662	1 257	1 123	1 150	1 348	2 050	2 687	2 360
Flows	Low	1 045	1 020	1 093	0 945	0 757	0 549	0 483	0 433	0 604	0 676	0 721	0 853	1 327
(m ³ s ⁻¹)	High	5 889	6 616	6 202	4 782	3 376	2 907	1 755	1 526	2 300	2 581	5 047	5 504	3 233
Peak flow (m ³ s ⁻¹)		11 87	9 18	9 37	6 48	8 11	9 23	4 79	4 50	8 18	9 29	9 20	8 44	11 87
Runoff (mm)		52	60	58	42	32	24	18	16	16	20	29	39	407
Rainfall (mm)		110	89	81	49	69	61	51	64	86	85	108	108	961

Factors affecting flow regime I
Station type FL

1981 runoff is 111% of previous mean
rainfall 111%

045001 Exe at Thorverton

1981

Measuring authority SWWA
First year 1966

Grid reference SS 936016
Level stn (m OD) 25 85

Catchment area (sq km) 600 9
Max alt (m OD) 519

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	23 640	15 390	49 630	7 959	17 680	10 850	3 399	2 738	8 824	34 520	22 040	41 370	19 837
(m ³ s ⁻¹)	Peak	117 40	64 51	265 60	20 78	46 40	55 24	7 30	13 23	103 60	89 36	72 94	157 50	265 60
Runoff (mm)		105	62	221	34	79	47	15	12	38	154	95	184	1047
Rainfall (mm)		96	92	222	57	140	56	65	35	182	202	95	207	1449

Monthly and yearly statistics for previous record (May 1956 to Dec 1980)

Mean	Avg	27 930	27 010	17 740	12 910	8 322	5 593	4 756	6 666	9 684	15 720	21 650	29 610	15 582
Flows	Low	5 438	6 451	6 376	4 340	2 593	1 989	1 153	0 696	1 699	1 561	5 297	12 460	9 698
(m ³ s ⁻¹)	High	42 750	47 220	35 690	28 800	15 890	15 870	19 770	17 140	35 830	59 830	44 000	68 440	22 601
Peak flow (m ³ s ⁻¹)		229 30	213 50	101 90	139 40	55 52	94 62	202 00	88 47	236 50	250 10	200 60	492 60	492 60
Runoff (mm)		125	110	79	56	37	24	21	30	42	70	93	132	818
Rainfall (mm)		140	107	97	74	76	72	84	101	109	117	129	150	1256

Factors affecting flow regime PGEI
Station type VA

1981 runoff is 128% of previous mean
rainfall 115%

045003 Culm at Wood Mill

1981

Measuring authority SWWA
First year 1962

Grid reference ST 021058
Level stn (m OD) 43 97

Catchment area (sq km) 226 1
Max alt (m OD) 293

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	4 203	3 744	9 184	3 131	4 881	2 767	1 589	1 342	2 230	4 721	2 925	11 880	4 383
(m ³ s ⁻¹)	Peak	20 08	22 01	50 11	18 42	15 67	20 63	7 94	10 04	18 21	22 13	8 80	114 50	114 50
Runoff (mm)		50	40	109	36	58	32	19	16	26	56	34	141	615
Rainfall (mm)		63	69	151	50	125	46	46	28	152	126	50	203	1109

Monthly and yearly statistics for previous record (Oct 1962 to Dec 1980)

Mean	Avg	6 432	6 860	5 010	3 175	2 716	2 020	1 874	1 691	1 984	2 863	4 270	5 454	3 681
Flows	Low	1 930	2 251	2 392	1 318	1 085	0 803	0 650	0 569	0 971	0 971	1 287	2 479	2 277
(m ³ s ⁻¹)	High	10 740	11 870	8 241	6 649	4 303	4 449	5 200	2 787	7 328	11 430	8 137	10 440	4 840
Peak flow (m ³ s ⁻¹)		78 23	100 10	40 70	41 63	33 82	30 58	202 20	58 62	94 16	45 87	134 50	142 80	202 20
Runoff (mm)		76	74	59	36	32	23	22	20	23	34	49	65	514
Rainfall (mm)		110	89	85	56	69	65	63	69	76	82	98	105	967

Factors affecting flow regime PGEI
Station type VA

1981 runoff is 120% of previous mean
rainfall 115%

045005 Otter at Dotton

1981

Measuring authority: SWWA Grid reference: SY 087885 Catchment area (sq km): 202.5
First year: 1963 Level stn. (m OD): 14.52 Max alt. (m OD): 299

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	2.974	3.846	7.293	7.423	5.354	2.930	1.420	1.214	1.786	3.521	2.153	9.874	3.732
(m ³ s ⁻¹)	Peak	15.26	64.38	65.25	11.56	80.38	25.79	4.52	4.01	15.14	21.21	5.67	97.77	97.77
Runoff (mm)		39	46	96	31	71	38	19	16	23	47	28	131	584
Rainfall (mm)		53	86	140	56	155	47	46	18	128	112	41	208	1090

Monthly and yearly statistics for previous record (Mar 1963 to Dec 1980)

Mean	Avg	5.860	5.756	4.361	2.668	2.317	1.792	1.644	1.466	1.733	2.648	3.725	4.739	3.215
Flows	Low	1.502	1.308	1.908	1.150	0.941	0.716	0.587	0.542	0.980	1.051	1.257	1.758	2.071
(m ³ s ⁻¹)	High	9.989	10.880	6.685	5.392	3.659	3.080	4.771	2.568	4.580	9.655	8.772	9.121	3.946
Peak flow (m ³ s ⁻¹)		100.80	73.08	49.70	69.66	45.87	45.87	346.90	35.96	66.91	47.58	84.95	123.60	346.90
Runoff (mm)		78	69	58	34	31	23	22	19	22	35	48	63	501
Rainfall (mm)		123	95	85	53	71	65	62	66	77	87	98	108	990

Factors affecting flow regime: SRPGEI 1981 runoff is 116% of previous mean
Station type: VA rainfall 110%

046002 Teign at Preston

1981

Measuring authority: SWWA Grid reference: SX 856746 Catchment area (sq km): 380.0
First year: 1956 Level stn. (m OD): 3.83 Max alt. (m OD): 604

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	9.288	8.426	27.430	7.038	13.340	5.937	2.233	1.449	3.619	12.120	7.959	28.160	10.583
(m ³ s ⁻¹)	Peak	54.25	71.00	146.60	14.75	42.28	26.33	4.27	4.44	71.12	33.32	36.96	168.70	168.70
Runoff (mm)		65	54	193	48	94	41	16	10	25	85	54	199	884
Rainfall (mm)		74	106	227	48	181	47	40	35	192	175	81	266	1472

Monthly and yearly statistics for previous record (May 1958 to Dec 1980—incomplete or missing months total 0.1 years)

Mean	Avg	19.330	19.740	12.960	8.265	5.156	3.600	2.500	2.559	3.733	7.733	10.580	16.030	9.301
Flows	Low	3.341	5.534	4.878	3.514	1.827	1.114	0.731	0.472	0.752	0.917	1.976	4.954	5.212
(m ³ s ⁻¹)	High	36.080	38.750	29.940	21.960	10.110	9.522	7.334	5.549	14.080	41.570	28.960	37.820	15.681
Peak flow (m ³ s ⁻¹)		172.70	198.20	82.59	122.50	86.08	81.35	98.87	72.64	312.80	190.00	153.60	248.40	312.80
Runoff (mm)		136	127	91	56	36	25	18	18	25	55	72	113	772
Rainfall (mm)		161	124	106	74	79	67	72	89	101	116	130	154	1273

Factors affecting flow regime: SRPGEI 1981 runoff is 114% of previous mean
Station type: VA rainfall 116%

046003 Dart at Austins Bridge

1981

Measuring authority: SWWA Grid reference: SX 751659 Catchment area (sq km): 247.6
First year: 1958 Level stn. (m OD): 22.43 Max alt. (m OD): 604

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	11.660	9.513	33.520	8.057	14.290	8.135	2.531	1.477	6.301	17.000	10.780	21.890	11.930
(m ³ s ⁻¹)	Peak	85.21	79.91	192.60	15.17	51.88	54.40	7.71	3.15	180.10	69.53	69.53	183.60	192.60
Runoff (mm)		126	93	363	63	155	85	27	16	66	184	113	237	1528
Rainfall (mm)		119	144	386	53	244	82	57	21	269	257	128	309	2069

Monthly and yearly statistics for previous record (Oct 1958 to Dec 1980)

Mean	Avg	19.850	18.260	13.680	10.080	7.308	5.037	4.023	4.817	6.145	10.170	14.510	18.990	11.042
Flows	Low	5.435	4.270	5.731	3.568	2.220	1.456	0.996	0.713	0.905	1.229	5.048	8.650	7.304
(m ³ s ⁻¹)	High	36.680	37.760	28.710	22.720	11.960	14.260	10.930	8.490	26.290	28.000	32.960	35.540	15.682
Peak flow (m ³ s ⁻¹)		284.00	309.40	218.30	187.40	98.88	253.00	206.50	190.30	327.60	168.70	295.50	549.70	549.70
Runoff (mm)		215	180	148	106	79	53	44	52	64	110	152	205	1407
Rainfall (mm)		230	169	156	118	104	91	97	123	130	163	198	226	1805

Factors affecting flow regime: SRPGEI 1981 runoff is 109% of previous mean
Station type: VA rainfall 115%

047007 Yealm at Puslinch

1981

Measuring authority: SWWA Grid reference: SX 574511 Catchment area (sq km): 54.9
First year: 1962 Level stn. (m OD): 5.49 Max alt. (m OD): 492

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1.778	1.541	5.290	0.975	1.685	2.093	0.463	0.220	1.040	2.401	1.647	3.563	1.891
(m ³ s ⁻¹)	Peak	12.04	10.99	24.11	2.29	7.96	22.45	0.74	0.63	20.69	20.14	6.26	23.13	24.11
Runoff (mm)		87	68	258	46	82	99	23	11	49	117	78	174	1091
Rainfall (mm)		86	129	311	38	204	116	66	9	231	187	80	269	1726

Monthly and yearly statistics for previous record (Oct 1963 to Dec 1980—incomplete or missing months total 0.2 years)

Mean	Avg	2.959	3.162	2.058	1.335	1.019	0.792	0.631	0.671	0.850	1.283	2.153	2.783	1.634
Flows	Low	0.563	1.318	0.659	0.572	0.327	0.171	0.095	0.057	0.183	0.121	0.373	1.171	1.052
(m ³ s ⁻¹)	High	4.603	5.806	3.747	3.646	1.997	2.377	1.863	1.778	3.630	3.808	4.872	6.108	2.210
Peak flow (m ³ s ⁻¹)		23.22	23.24	22.94	20.53	17.53	23.47	25.22	23.79	21.33	22.79	26.62	23.10	26.62
Runoff (mm)		144	141	100	63	50	37	31	33	40	63	102	136	939
Rainfall (mm)		165	140	119	79	92	90	89	104	108	116	159	160	1421

Factors affecting flow regime: PGEI 1981 runoff is 116% of previous mean
Station type: FLVA rainfall 121%

047008 Thrushel at Tinhay

1981

Measuring authority SWWA Grid reference SX 398856 Catchment area (sq km) 112.7
First year 1969 Level stn. (m OD) 55.47 Max alt. (m OD) 299

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	3 278	2 508	7 477	1 059	3 300	1 026	0 447	0 277	1 521	6 878	7 421	6 476	3 056
(m ³ s ⁻¹)	Peak	30 96	18 46	61 46	6 52	18 83	6 60	7 82	21 48	32 92	29 53	15 09	68 85	68 85
Runoff (mm)		78	54	178	24	78	24	11	7	35	163	56	154	861
Rainfall (mm)		73	61	194	47	139	39	97	20	170	208	71	190	1329

Monthly and yearly statistics for previous record (Nov 1969 to Dec 1980)

Mean	Avg	5 400	4 756	2 990	1 412	0 852	0 817	0 421	0 626	1 139	1 712	3 623	4 485	2 341
flows	Low	1 317	1 879	1 428	0 481	0 237	0 110	0 028	0 019	0 116	0 069	0 442	2 405	1 640
(m ³ s ⁻¹)	High	9 701	8 826	5 398	2 240	2 072	2 491	1 095	1 386	6 671	5 399	6 238	8 122	3 750
Peak flow (m ³ s ⁻¹)		53 32	61 78	42 06	27 72	19 16	57 13	9 89	27 33	75 12	55 86	57 07	124 40	124 40
Runoff (mm)		128	103	71	32	20	19	10	15	28	41	83	107	656
Rainfall (mm)		162	115	96	56	61	78	70	91	91	95	138	134	1187

Factors affecting flow regime: GE 1981 runoff is 131% of previous mean
Station type: CC rainfall 112%

048001 Fowey at Trekeivesteps

1981

Measuring authority SWWA Grid reference SX 227698 Catchment area (sq km) 36.8
First year 1969 Level stn. (m OD) 187.86 Max alt. (m OD) 420

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1 606	1 414	3 324	0 961	1 483	1 288	0 598	0 367	0 832	3 135	1 708	3 077	1 649
(m ³ s ⁻¹)	Peak	7 41	7 04	20 68	1 82	9 39	9 20	3 84	0 91	13 37	12 43	7 04	35 81	35 61
Runoff (mm)		117	93	242	68	108	91	44	27	59	228	120	274	1420
Rainfall (mm)		117	131	281	43	209	109	123	18	263	294	107	294	1989

Monthly and yearly statistics for previous record (Oct 1957 to Dec 1980—incomplete or missing months total 0.8 years)

Mean	Avg	2 431	2 190	1 496	1 137	0 831	0 591	0 559	0 717	0 881	1 288	1 910	2 377	1 364
flows	Low	0 866	0 799	0 908	0 499	0 315	0 226	0 238	0 230	0 122	0 223	0 313	1 478	0 843
(m ³ s ⁻¹)	High	4 347	4 692	2 584	1 942	1 324	1 424	1 751	2 579	3 217	3 367	3 578	4 551	1 915
Peak flow (m ³ s ⁻¹)		31 08	31 57	12 86	15 01	9 12	18 32	16 29	21 51	27 65	26 34	34 26	38 75	38 75
Runoff (mm)		177	145	109	80	60	42	41	52	62	94	135	173	1169
Rainfall (mm)		204	137	125	99	96	90	111	128	132	155	183	200	1660

Factors affecting flow regime: SRPG 1981 runoff is 121% of previous mean
Station type: CC rainfall 120%

048004 Warleggan at Trengoffe

1981

Measuring authority SWWA Grid reference SX 159674 Catchment area (sq km) 25.3
First year 1969 Level stn. (m OD) 70.26 Max alt. (m OD) 308

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1 007	0 855	1 557	0 660	0 808	0 904	0 446	0 254	0 424	1 510	0 999	1 597	0 918
(m ³ s ⁻¹)	Peak	2 06	2 15	4 77	1 20	2 41	4 00	1 28	0 76	3 72	3 99	2 17	8 44	8 44
Runoff (mm)		107	82	165	68	86	93	47	27	43	160	102	169	1148
Rainfall (mm)		102	121	223	41	181	93	121	13	236	250	83	263	1727

Monthly and yearly statistics for previous record (Oct 1969 to Dec 1980—incomplete or missing months total 0.3 years)

Mean	Avg	1 551	1 635	1 083	0 702	0 486	0 379	0 324	0 366	0 487	0 587	0 957	1 350	0 822
flows	Low	0 744	0 982	0 805	0 489	0 310	0 216	0 169	0 118	0 208	0 208	0 233	0 907	0 643
(m ³ s ⁻¹)	High	2 584	2 906	1 588	1 068	0 763	0 790	0 688	0 563	1 677	1 557	1 696	1 949	1 228
Peak flow (m ³ s ⁻¹)		14 31	14 85	5 27	4 59	3 19	5 96	4 36	8 60	14 85	7 86	15 38	11 25	15 38
Runoff (mm)		164	158	115	72	51	39	34	39	50	62	98	143	1025
Rainfall (mm)		189	134	123	63	75	81	89	107	125	123	158	173	1435

Factors affecting flow regime: G 1981 runoff is 112% of previous mean
Station type: CC rainfall 120%

048005 Kenwyn at Truro

1981

Measuring authority SWWA Grid reference SW 820450 Catchment area (sq km) 19.1
First year 1968 Level stn. (m OD) 7.16 Max alt. (m OD) 152

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0 408	0 417	0 917	0 315	0 310	0 220	0 122	0 073	0 120	0 562	0 391	0 939	0 399
(m ³ s ⁻¹)	Peak	0 69	7 19	2 74	0 66	1 41	0 51	0 37	0 47	1 21	3 15	0 73	6 11	7 19
Runoff (mm)		57	53	129	43	43	30	17	10	16	79	53	132	662
Rainfall (mm)		62	108	149	36	131	41	67	5	173	166	54	226	1218

Monthly and yearly statistics for previous record (Oct 1968 to Dec 1980)

Mean	Avg	0 857	0 915	0 583	0 298	0 183	0 140	0 089	0 090	0 123	0 225	0 441	0 734	0 387
flows	Low	0 283	0 517	0 341	0 162	0 128	0 071	0 043	0 026	0 037	0 034	0 046	0 436	0 264
(m ³ s ⁻¹)	High	1 322	1 536	0 883	0 524	0 277	0 358	0 162	0 122	0 564	0 633	0 747	1 091	0 644
Peak flow (m ³ s ⁻¹)		5 88	5 74	5 74	2 93	1 32	3 71	2 79	1 99	4 10	5 94	8 61	13 35	13 35
Runoff (mm)		120	117	82	40	26	19	12	13	17	32	60	103	640
Rainfall (mm)		153	118	95	53	62	63	58	78	87	96	133	136	1132

Factors affecting flow regime: G 1981 runoff is 103% of previous mean
Station type: CC rainfall 108%

048011 Fowey at Restormel two

1981

Measuring authority: SWWA
First year: 1972

Grid reference: SX 098624
Level stn. (m OD) 9.24

Catchment area (sq km): 169.1
Max alt. (m OD): 420

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	5 954	4 907	12 130	3 374	4 875	4 916	1 786	0 894	2 293	11 720	5 935	13 270	6 005
(m ³ s ⁻¹)	Peak	14 32	12 32	45 62	7 22	16 00	19 07	6 08	2 66	21 70	29 88	14 16	84 94	84 94
Runoff (mm)		94	70	192	52	77	75	28	14	35	186	91	210	1125
Rainfall (mm)		99	116	235	38	176	85	107	13	240	257	86	264	1716

Monthly and yearly statistics for previous record (Nov 1972 to Dec 1980)

Mean	Avg	9 014	10 660	6 339	3 791	2 194	1 453	1 127	1 360	2 851	4 451	5 476	9 571	4 830
flows	Low	3 901	6 718	4 075	2 062	1 359	0 750	0 575	0 343	0 723	0 617	0 921	5 796	3 847
(m ³ s ⁻¹)	High	17 330	21 780	9 850	6 063	3 468	3 120	1 857	2 368	10 490	9 371	9 708	14 260	7 440
Peak flow (m ³ s ⁻¹)		56 44	95 15	27 55	21 74	14 04	9 25	4 95	31 81	70 02	35 07	57 51	126 60	126 60
Runoff (mm)		143	154	100	58	35	22	18	22	44	71	84	152	901
Rainfall (mm)		179	151	158	70	65	80	98	103	100	104	141	204	1453

Factors affecting flow regime: SRPGEI
Station type: CC

1981 runoff is 125% of previous mean
rainfall 118%

049001 Camel at Denby

1981

Measuring authority: SWWA
First year: 1964

Grid reference: SX 017682
Level stn. (m OD) 4.61

Catchment area (sq km): 208.8
Max alt. (m OD): 420

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	7 070	5 903	16 420	4 290	6 168	5 216	2 584	1 599	3 462	16 640	7 444	17 190	7 832
(m ³ s ⁻¹)	Peak	18 61	22 29	94 75	8 61	16 98	27 62	11 44	8 30	30 07	92 14	17 13	118 20	118 20
Runoff (mm)		91	68	211	53	79	65	33	21	43	213	92	220	1190
Rainfall (mm)		78	103	216	44	156	70	111	12	228	243	78	250	1589

Monthly and yearly statistics for previous record (Sep 1964 to Dec 1980)

Mean	Avg	11 350	10 560	6 653	4 133	3 006	2 229	2 315	2 415	3 047	4 517	7 019	10 630	5 837
flows	Low	4 833	4 249	2 835	2 081	0 960	0 888	0 587	0 421	0 798	0 882	1 371	6 552	4 081
(m ³ s ⁻¹)	High	19 600	20 940	11 040	7 608	4 935	5 463	7 323	5 947	11 920	11 970	13 760	19 110	8 165
Peak flow (m ³ s ⁻¹)		65 19	80 21	40 86	35 42	23 32	40 02	40 59	45 14	125 80	68 30	79 29	227 90	227 90
Runoff (mm)		146	123	85	51	39	28	30	31	38	58	87	136	852
Rainfall (mm)		179	120	113	73	82	86	101	106	117	121	154	163	1416

Factors affecting flow regime: PGE
Station type: VA

1981 runoff is 140% of previous mean
rainfall 112%

049002 Hayle at St Erth

1981

Measuring authority: SWWA
First year: 1968

Grid reference: SW 549342
Level stn. (m OD) 7 00

Catchment area (sq km): 48.9
Max alt. (m OD): 238

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1 165	1 028	2 337	1 305	0 818	0 856	0 571	0 359	0 342	0 918	1 102	2 083	1 074
(m ³ s ⁻¹)	Peak	1 50	2 24	3 84	2 22	1 27	1 68	0 76	0 49	0 62	1 44	1 37	4 08	4 08
Runoff (mm)		64	51	128	69	45	45	31	20	18	50	58	114	694
Rainfall (mm)		67	90	174	42	117	63	45	4	188	154	52	208	1204

Monthly and yearly statistics for previous record (Oct 1957 to Dec 1980—incomplete or missing months total 9.3 years)

Mean	Avg	1 871	2 238	1 654	0 987	0 611	0 463	0 399	0 354	0 376	0 434	0 827	1 455	0 988
flows	Low	0 746	0 863	0 810	0 573	0 475	0 335	0 237	0 167	0 204	0 179	0 181	0 503	0 653
(m ³ s ⁻¹)	High	2 849	3 426	2 582	1 641	0 789	0 669	1 063	0 743	1 067	1 140	1 809	2 473	1 245
Peak flow (m ³ s ⁻¹)		6 20	6 73	5 83	3 07	1 04	1 72	1 99	2 27	1 88	2 32	3 00	6 31	6 73
Runoff (mm)		102	112	91	52	33	25	22	19	20	24	44	80	624
Rainfall (mm)		131	108	99	61	64	61	68	82	89	107	128	136	1134

Factors affecting flow regime: G
Station type: CC

1981 runoff is 111% of previous mean
rainfall 106%

050002 Torridge at Torrington

1981

Measuring authority: SWWA
First year: 1962

Grid reference: SS 500185
Level stn. (m OD) 13.95

Catchment area (sq km): 663.0
Max alt. (m OD): 621

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	19 860	13 800	51 280	6 366	17 090	6 801	2 571	2 224	11 140	49 230	21 200	36 640	19 860
(m ³ s ⁻¹)	Peak	145 70	89 01	535 60	26 68	58 37	38 64	19 43	14 42	122 90	145 60	113 40	197 60	535 60
Runoff (mm)		80	50	207	25	69	27	10	9	44	199	83	148	961
Rainfall (mm)		80	77	227	42	127	41	91	32	172	242	92	164	1387

Monthly and yearly statistics for previous record (Oct 1962 to Dec 1980)

Mean	Avg	27 780	26 120	16 790	10 500	7 726	5 063	5 066	4 919	7 342	11 910	24 750	28 960	14 690
flows	Low	5 018	4 695	8 703	3 082	1 594	1 136	0 443	0 253	0 954	0 668	3 798	10 270	8 868
(m ³ s ⁻¹)	High	45 050	47 590	34 840	28 120	19 250	14 960	21 540	14 280	45 910	42 990	49 410	64 530	21 036
Peak flow (m ³ s ⁻¹)		271 80	294 40	150 40	153 00	107 20	181 30	310 60	228 50	415 00	225 00	313 20	730 00	730 00
Runoff (mm)		112	96	68	41	31	20	20	20	29	48	97	117	699
Rainfall (mm)		124	95	90	66	73	75	77	85	92	96	135	123	1131

Factors affecting flow regime: SRPGEI
Station type: VA

1981 runoff is 136% of previous mean
rainfall 123%

052006 Yeo at Pen Mill

1981

Measuring authority WWA
First year 1962
Grid reference ST 573162
Level stn. (m OD) 23 85
Catchment area (sq km) 213 1
Max alt. (m OD) 252

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	2 371	2 243	7 060	1 513	2 298	1 744	0 601	0 494	1 295	3 336	2 038	7 073	2 672
(m ³ s ⁻¹)	Peak	5 90	16 78	28 57	3 18	17 47	26 01	1 75	2 82	10 13	15 65	6 48	40 81	40 81
Runoff (mm)		30	25	89	18	29	21	8	6	16	42	25	89	388
Rainfall (mm)		44	59	141	33	106	48	48	33	149	94	46	148	949

Monthly and yearly statistics for previous record (Nov 1963 to Dec 1980)

Mean	Avg	5 421	4 968	3 654	1 771	1 614	1 039	0 665	0 729	1 028	2 060	3 400	4 339	2 547
flows	Low	0 485	1 168	0 909	0 532	0 356	0 229	0 193	0 166	0 316	0 372	0 492	1 079	1 093
(m ³ s ⁻¹)	High	8 612	10 060	6 462	4 273	4 887	2 358	1 909	1 607	5 174	9 808	12 800	9 099	3 594
Peak flow (m ³ s ⁻¹)		99 93	119 30	41 90	21 80	130 00	32 57	35 74	21 95	27 64	54 94	71 25	138 90	138 90
Runoff (mm)		68	57	46	22	20	13	8	9	13	26	41	55	377
Rainfall (mm)		99	77	76	47	69	60	56	88	76	74	90	94	886

Factors affecting flow regime
Station type: C VA
1981 runoff is 105% of previous mean
rainfall 107%

052007 Parrett at Chiselborough

1981

Measuring authority WWA
First year 1966
Grid reference ST 461144
Level stn. (m OD) 20 72
Catchment area (sq km) 74 8
Max alt. (m OD) 219

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0 738	0 854	3 055	0 632	0 982	0 699	0 343	0 393	0 808	1 596	0 835	3 917	1 238
(m ³ s ⁻¹)	Peak	1 64	7 64	15 01	1 33	8 11	7 91	0 39	5 58	10 54	10 28	2 41	30 05	30 05
Runoff (mm)		26	28	109	22	35	24	12	14	28	57	29	140	525
Rainfall (mm)		37	58	148	26	114	45	46	54	154	96	44	162	984

Monthly and yearly statistics for previous record (Aug 1966 to Dec 1980)

Mean	Avg	2 406	2 184	1 563	0 735	0 717	0 511	0 362	0 338	0 455	1 031	1 161	1 756	1 098
flows	Low	0 258	0 593	0 523	0 285	0 206	0 130	0 106	0 090	0 193	0 186	0 218	0 523	0 564
(m ³ s ⁻¹)	High	4 019	3 865	2 871	1 581	1 718	1 053	0 921	0 591	2 225	4 819	2 601	3 560	1 507
Peak flow (m ³ s ⁻¹)		36 38	18 84	18 55	12 34	21 73	12 81	16 14	7 92	15 29	24 58	114 30	44 94	114 30
Runoff (mm)		86	71	56	25	26	18	13	12	16	37	40	63	463
Rainfall (mm)		111	85	80	42	72	66	55	70	78	83	83	97	922

Factors affecting flow regime N
Station type: C
1981 runoff is 113% of previous mean
rainfall 107%

053004 Chew at Compton Dando

1981

Measuring authority WWA
First year 1958
Grid reference ST 648647
Level stn. (m OD) 16 76
Catchment area (sq km) 129 5
Max alt. (m OD) 305

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0 783	0 754	2 793	0 901	1 027	0 954	0 506	0 478	0 740	1 824	1 318	2 853	1 244
(m ³ s ⁻¹)	Peak	1 21	2 34	20 93	1 50	6 22	13 00	1 35	1 23	4 39	12 42	6 46	63 78	63 78
Runoff (mm)		16	14	58	18	21	19	10	10	15	38	26	59	305
Rainfall (mm)		45	49	184	48	119	55	76	42	170	166	73	157	1184

Monthly and yearly statistics for previous record (Oct 1968 to Dec 1980—incomplete or missing months total 1.0 years)

Mean	Avg	1 744	1 747	1 273	0 958	0 746	0 565	0 456	0 429	0 551	0 775	1 130	1 611	0 895
flows	Low	0 444	0 557	0 416	0 469	0 057	0 288	0 251	0 195	0 232	0 307	0 272	0 626	0 545
(m ³ s ⁻¹)	High	3 765	4 166	2 289	2 185	2 215	1 211	0 811	0 638	2 135	3 251	3 898	5 017	1 767
Peak flow (m ³ s ⁻¹)		25 49	48 99	11 77	14 19	67 50	10 73	6 23	6 09	59 26	49 56	38 83	61 16	67 50
Runoff (mm)		36	33	26	19	15	11	9	9	11	16	23	33	242
Rainfall (mm)		98	74	74	62	69	68	73	88	89	84	103	110	992

Factors affecting flow regime SRPGEI
Station type: FL
1981 runoff is 126% of previous mean
rainfall 119%

053007 Frome(Somerset) at Tellisford

1981

Measuring authority WWA
First year 1961
Grid reference ST 805564
Level stn. (m OD) 35 05
Catchment area (sq km) 261 6
Max alt. (m OD) 305

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	3 885	3 078	12 690	3 262	3 646	2 569	1 326	0 989	1 653	5 725	3 957	9 287	4 339
(m ³ s ⁻¹)	Peak	17 52	15 05	68 83	12 38	14 10	12 00	6 32	6 32	11 88	23 39	11 25	36 00	68 83
Runoff (mm)		40	28	130	32	37	25	14	10	16	59	39	95	526
Rainfall (mm)		53	49	195	45	102	46	73	24	148	128	57	140	1060

Monthly and yearly statistics for previous record (Sep 1961 to Dec 1980)

Mean	Avg	6 418	6 639	5 349	3 537	2 729	1 881	1 483	1 541	1 824	2 459	4 352	6 044	3 674
flows	Low	1 684	2 072	1 938	1 510	0 843	0 518	0 329	0 290	0 649	0 612	0 962	2 795	2 334
(m ³ s ⁻¹)	High	10 440	12 460	10 540	8 314	6 010	4 812	4 931	4 605	7 459	8 841	10 730	14 860	4 885
Peak flow (m ³ s ⁻¹)		54 37	64 75	38 43	57 51	98 80	37 52	108 10	82 49	71 03	40 24	84 58	83 64	108 10
Runoff (mm)		66	62	55	35	28	19	15	16	18	25	43	62	443
Rainfall (mm)		93	74	82	62	76	66	65	84	86	74	97	100	959

Factors affecting flow regime PGEI
Station type: FL
1981 runoff is 119% of previous mean
rainfall 111%

053009 Wellow Brook at Wellow**1981**Measuring authority: WWA
First year: 1966Grid reference: ST 741581
Level stn. (m OD) 43.74Catchment area (sq km): 72.6
Max alt. (m OD): 220

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1.115	1.076	3.708	1.311	1.260	0.987	0.531	0.344	0.611	1.778	1.466	2.875	1.422
(m ³ s ⁻¹)	Peak	2.16	2.95	13.71	2.41	3.34	2.83	2.14	0.96	3.08	4.11	2.98	13.63	13.71
Runoff (mm)		41	36	137	47	47	35	20	13	22	66	52	106	620
Rainfall (mm)		52	56	203	41	116	53	67	27	168	142	65	157	1142

Monthly and yearly statistics for previous record (Jan 1966 to Dec 1980)

Mean	Avg	2.186	2.498	1.817	1.191	0.938	0.645	0.481	0.403	0.499	0.862	1.360	1.943	1.229
Flows	Low	0.641	0.895	0.688	0.600	0.378	0.244	0.157	0.119	0.199	0.274	0.274	1.104	0.762
(m ³ s ⁻¹)	High	3.142	4.429	3.406	2.111	1.907	1.306	1.680	0.727	2.008	2.686	2.916	3.542	1.561
Peak flow (m ³ s ⁻¹)		15.11	22.36	13.19	11.08	23.16	6.84	29.54	3.79	15.07	7.88	14.59	24.43	29.54
Runoff (mm)		81	84	67	43	35	23	18	15	18	32	49	72	534
Rainfall (mm)		101	94	83	61	79	71	64	82	89	81	101	102	1008

Factors affecting flow regime: PGEI
Station type: FL1981 runoff is 116% of previous mean
rainfall 113%**053018 Avon at Bathford****1981**Measuring authority: WWA
First year: 1969Grid reference: ST 786671
Level stn. (m OD) 18.00Catchment area (sq km): 1552.0
Max alt. (m OD): 305

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	16.380	14.730	54.230	17.470	16.770	11.980	5.904	4.503	6.942	22.380	17.950	40.090	18.069
(m ³ s ⁻¹)	Peak	32.19	32.57	171.00	39.38	41.71	32.51	12.08	14.06	23.59	63.46	48.69	148.70	171.00
Runoff (mm)		28	22	94	29	29	20	10	8	12	39	30	69	389
Rainfall (mm)		39	44	163	38	89	39	63	18	148	135	53	121	950

Monthly and yearly statistics for previous record (Dec 1969 to Dec 1980)

Mean	Avg	31.140	35.850	25.130	16.160	11.980	10.480	6.276	6.177	7.168	10.110	17.080	26.410	16.897
Flows	Low	9.225	11.370	10.080	7.718	5.047	3.898	2.411	1.715	3.748	3.117	4.407	12.120	10.361
(m ³ s ⁻¹)	High	45.300	64.340	46.910	22.690	25.870	30.110	9.955	10.600	25.450	28.180	33.120	48.270	22.133
Peak flow (m ³ s ⁻¹)		146.30	226.50	119.90	119.60	227.00	165.60	54.93	64.71	191.90	88.98	163.10	300.50	300.50
Runoff (mm)		54	56	43	27	21	18	11	11	12	17	29	46	344
Rainfall (mm)														

Factors affecting flow regime: RPGE
Station type: VA

1981 runoff is 113% of previous mean

054002 Avon at Evesham**1981**Measuring authority: STWA
First year: 1937Grid reference: SP 040438
Level stn. (m OD) 19.50Catchment area (sq km): 2210.0
Max alt. (m OD): 320

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	20.820	17.230	50.250	26.090	18.550	11.360	5.859	10.800	17.880	17.630	13.910	37.630	20.667
(m ³ s ⁻¹)	Peak	44.44	49.32	219.40	138.70	55.64	54.56	8.52	70.47	111.80	67.46	30.29	262.80	262.80
Runoff (mm)		25	19	61	31	22	13	7	13	21	21	16	46	296
Rainfall (mm)		37	35	97	50	68	27	25	80	127	61	33	73	713

Monthly and yearly statistics for previous record (Dec 1938 to Dec 1980)

Mean	Avg	27.440	28.460	21.720	13.860	10.850	7.851	6.464	6.529	6.477	9.070	17.250	21.890	14.758
Flows	Low	5.140	4.869	2.261	3.240	2.220	1.935	2.253	2.038	1.970	2.484	2.677	3.548	6.895
(m ³ s ⁻¹)	High	73.520	77.930	75.600	35.160	35.980	27.380	42.230	16.100	24.210	45.410	55.910	65.160	25.025
Peak flow (m ³ s ⁻¹)		242.40	202.50	224.80	130.00	132.50	178.70	371.00	96.84	108.70	140.70	142.70	216.60	371.00
Runoff (mm)		33	31	26	16	13	9	8	8	8	11	20	27	211
Rainfall (mm)		61	44	47	42	55	53	58	72	54	57	65	60	668

Factors affecting flow regime: PGEI
Station type: VA1981 runoff is 140% of previous mean
rainfall 107%**055008 Wye at Cefn Brwyn****1981**Measuring authority: IH
First year: 1951Grid reference: SN 829838
Level stn. (m OD) 341.01Catchment area (sq km): 10.4
Max alt. (m OD): 752

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	1.076	0.635	1.735	0.184	0.492	0.375	0.327	0.200	0.843	1.753	1.078	0.552	0.771
(m ³ s ⁻¹)	Peak	17.89	19.20	14.87	1.03	4.24	2.18	5.86	3.11	8.34	15.84	20.22	3.65	20.22
Runoff (mm)		277	148	447	46	127	94	84	51	210	452	269	142	2348
Rainfall (mm)		282	186	517	91	169	104	136	92	320	526	310	186	2919

Monthly and yearly statistics for previous record (Aug 1951 to Dec 1980—incomplete or missing months total 2.5 years)

Mean	Avg	0.894	0.778	0.603	0.552	0.426	0.343	0.470	0.594	0.668	0.747	1.036	1.112	0.665
Flows	Low	0.519	0.158	0.290	0.064	0.054	0.074	0.095	0.036	0.050	0.092	0.376	0.198	0.447
(m ³ s ⁻¹)	High	1.398	1.466	1.599	1.312	1.144	0.844	1.264	1.478	1.478	2.031	1.600	2.655	0.994
Peak flow (m ³ s ⁻¹)		19.04	18.09	16.97	19.12	17.89	25.49	19.11	48.87	16.93	24.32	29.15	32.00	48.87
Runoff (mm)		230	182	155	138	110	86	121	153	167	192	258	286	2078
Rainfall (mm)		242	175	174	163	144	143	166	183	193	222	276	307	2388

Factors affecting flow regime:
Station type: CC1981 runoff is 113% of previous mean
rainfall 122%

055012 Irjon at Cilmery

1981

Measuring authority: WELS
First year: 1966

Grid reference: SN 995507
Level stn. (m OD): 136.29

Catchment area (sq km): 244.2
Max alt. (m OD): 645

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows (m ³ s ⁻¹)	Avg	12 370	9 404	31 790	2 817	6 501	4 961	11 260	0 985	11 710	23 780	14 010	11 670	10 936
	Peak	90 37	109 50	211 50	7 40	21 65	41 50	8 05	6 50	136 00	116 70	103 50	56 37	211 60
Runoff (mm)		136	93	349	30	71	53	14	11	124	261	149	128	1418
Rainfall (mm)		133	125	364	55	129	67	57	54	273	291	150	150	1848

Monthly and yearly statistics for previous record (Oct 1966 to Dec 1980—incomplete or missing months total 1.2 years)

Mean flows	Avg	15 780	13 610	9 615	6 550	5 554	3 475	2 745	4 785	6 165	9 948	14 710	17 510	9 185
(m ³ s ⁻¹)	Low	6 295	6 251	5 134	1 359	0 806	0 725	0 671	0 748	1 177	1 217	9 149	8 730	6 155
	High	25 570	23 750	21 880	16 010	10 650	9 737	5 820	8 124	18 200	29 760	29 070	29 320	11 769
Peak flow (m ³ s ⁻¹)		174 10	196 20	169 40	122 70	88 82	116 10	71 01	249 50	116 80	219 00	185 90	256 90	266 90
Runoff (mm)		173	136	105	70	61	37	30	52	65	109	156	192	1187
Rainfall (mm)		189	140	129	90	98	84	91	111	131	148	189	195	1695

Factors affecting flow regime:
Station type: FVVA

1981 runoff is 119% of previous mean
rainfall: 116%

055014 Lugg at Byton

1981

Measuring authority: WELS
First year: 1966

Grid reference: SO 364647
Level stn. (m OD): 124.07

Catchment area (sq km): 203.3
Max alt. (m OD): 660

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows (m ³ s ⁻¹)	Avg	4 533	4 200	13 980	4 006	5 070	3 301	1 389	0 963	1 558	4 606	3 568	4 848	4 335
	Peak	6 83	7 31	33.25	7 07	10 95	8 91	1 84	2 03	7 81	8 72	5 40	22 26	33 25
Runoff (mm)		60	50	184	51	67	42	18	13	20	61	45	64	675
Rainfall (mm)		53	83	189	57	115	40	25	37	181	105	54	118	1057

Monthly and yearly statistics for previous record (Oct 1966 to Dec 1980)

Mean flows	Avg	7 222	7 380	5 860	3 677	3 182	1 996	1 497	1 179	1 308	2 655	4 206	6 207	3 849
(m ³ s ⁻¹)	Low	2 991	2 630	2 947	2 016	1 207	0 772	0 557	0 414	0 678	0 657	1 219	2 978	2 321
	High	10 180	12 870	11 570	7 106	7 994	3 989	5 253	1 992	3 079	7 962	8 636	10 350	4 954
Peak flow (m ³ s ⁻¹)		54 27	37 53	24 20	16 93	45 56	10 72	26 16	9 52	8 37	28 51	19 98	37 49	54 27
Runoff (mm)		95	89	77	47	42	25	20	16	17	35	54	82	597
Rainfall (mm)		118	93	87	58	81	60	62	76	89	86	100	110	1020

Factors affecting flow regime:
Station type: FVVA

1981 runoff is 113% of previous mean
rainfall: 104%

055023 Wye at Redbrook

1981

Measuring authority: WELS
First year: 1969

Grid reference: SO 528110
Level stn. (m OD): 9.20

Catchment area (sq km): 4010.0
Max alt. (m OD): 752

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows (m ³ s ⁻¹)	Avg	82 830	67 450	245 200	55 960	71 880	51 890	19 590	14 590	46 490	121 700	78 570	116 600	81 092
	Peak	334 70	278 60	671 30	142 10	114 80	178 00	30 68	25 93	261 30	341 40	203 10	501 70	671 30
Runoff (mm)		55	41	164	36	48	34	13	10	30	81	51	78	641
Rainfall (mm)		59	70	196	62	109	45	32	40	193	130	70	131	1137

Monthly and yearly statistics for previous record (Oct 1969 to Dec 1980)

Mean flows	Avg	125 700	137 400	95 990	60 050	39 070	29 920	20 840	25 110	26 730	42 770	84 430	114 100	66 495
(m ³ s ⁻¹)	Low	56 630	46 880	37 450	25 450	18 470	10 960	7 433	5 178	14 870	12 230	36 260	46 890	45 669
	High	200 700	234 000	202 300	100 200	64 870	63 490	30 850	40 110	74 490	133 800	163 600	204 100	84 075
Peak flow (m ³ s ⁻¹)		453 30	640 60	406 80	302 60	247 40	199 80	77 66	373 20	185 00	335 30	413 70	768 90	768 90
Runoff (mm)		84	84	64	39	26	19	14	17	17	29	55	76	523
Rainfall (mm)		120	92	85	56	70	62	56	79	82	72	107	111	992

Factors affecting flow regime: S P E
Station type: VA

1981 runoff is 122% of previous mean
rainfall: 115%

056002 Ebbw at Rhiwderyn

1981

Measuring authority: WELS
First year: 1957

Grid reference: ST 259889
Level stn. (m OD): 30.57

Catchment area (sq km): 216.5
Max alt. (m OD): 610

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows (m ³ s ⁻¹)	Avg	5 588	5 125	25 000	5 776	8 477	6 421	2 550	1 745	8 608	12 580	10 210	9 820	8 500
	Peak	33 07	35 91	104 80	18 39	23 47	36 06	7 05	4 11	123 90	41 97	46 11	54 79	123 90
Runoff (mm)		69	57	309	69	105	77	33	22	103	156	122	121	1243
Rainfall (mm)		63	92	343	68	177	69	35	38	310	204	143	153	1696

Monthly and yearly statistics for previous record (Oct 1957 to Dec 1980—incomplete or missing months total 0.1 years)

Mean flows	Avg	11 770	10 670	7 832	5 939	4 625	3 336	2 785	2 989	4 212	7 198	8 711	11 980	6 820
(m ³ s ⁻¹)	Low	3 050	3 324	2 957	2 386	2 026	1 626	1 263	1 096	1 269	1 317	2 857	3 345	3 492
	High	19 820	20 440	18 730	11 060	9 545	6 809	9 019	5 295	11 940	23 210	19 940	29 440	9 629
Peak flow (m ³ s ⁻¹)		123 60	125 60	79 29	55 22	32 79	37 95	66 26	72 07	98 00	201 60	102 80	246 50	246 50
Runoff (mm)		146	120	97	71	57	40	34	37	50	89	104	148	994
Rainfall (mm)		164	121	108	92	95	82	88	104	129	137	157	177	1449

Factors affecting flow regime: S G
Station type: FVVA

1981 runoff is 125% of previous mean
rainfall: 117%

056007 Senni at Pont Hen Hafod**1981**Measuring authority: WELS
First year: 1967Grid reference: SN 928255
Level stn. (m OD) 219.60Catchment area (sq km): 19.9
Max alt. (m OD) 663**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.950	1.021	3.693	0.466	1.010	0.730	0.162	0.100	1.215	2.058	1.547	1.063	1.168
(m ³ s ⁻¹)	Peak	9.75	18.37	33.47	2.12	7.45	3.89	0.69	0.21	20.34	15.99	21.75	6.83	33.47
Runoff (mm)		128	124	497	61	136	95	22	13	158	277	207	143	1856
Rainfall (mm)		107	143	534	68	207	90	51	36	336	286	217	134	2209

Monthly and yearly statistics for previous record (Dec 1967 to Dec 1980—incomplete or missing months total 0.3 years)

Mean	Avg	1.596	1.336	1.047	0.669	0.566	0.397	0.309	0.490	0.675	0.903	1.532	1.593	0.924
flows	Low	0.567	0.707	0.509	0.168	0.121	0.111	0.095	0.066	0.181	0.171	0.272	0.827	0.587
(m ³ s ⁻¹)	High	3.278	2.478	2.039	1.334	1.176	1.077	0.605	0.916	2.111	1.795	2.336	3.274	1.260
Peak flow (m ³ s ⁻¹)		24.71	21.85	21.64	20.32	14.17	19.18	10.78	24.56	14.76	30.73	32.97	48.83	48.83
Runoff (mm)		215	164	141	87	76	57	47	66	88	122	200	214	1466
Rainfall (mm)		241	161	151	95	118	88	101	129	159	174	215	204	1836

Factors affecting flow regime: N
Station type: C1981 runoff is 127% of previous mean
rainfall 120%**056013 Yscir at Pontaryscir****1981**Measuring authority: WELS
First year: 1972Grid reference: SO 003304
Level stn. (m OD) 161.18Catchment area (sq km): 62.8
Max alt. (m OD) 474**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	2.376	1.924	6.303	0.884	1.358	1.199	0.329	0.234	1.937	4.182	2.659	2.716	2.175
(m ³ s ⁻¹)	Peak	19.98	23.76	39.41	2.63	3.62	14.52	0.60	0.92	21.41	21.03	15.94	14.31	39.41
Runoff (mm)		101	74	269	37	58	50	14	10	80	178	110	116	1096
Rainfall (mm)		100	93	329	56	119	47	44	43	256	211	109	137	1544

Monthly and yearly statistics for previous record (May 1972 to Dec 1980—incomplete or missing months total 0.2 years)

Mean	Avg	3.073	3.097	2.317	1.184	0.958	0.673	0.485	0.620	0.968	1.564	2.962	3.582	1.784
flows	Low	1.146	1.868	1.170	0.431	0.269	0.214	0.166	0.104	0.283	0.214	1.520	2.196	1.286
(m ³ s ⁻¹)	High	5.578	4.959	4.662	1.863	1.957	1.788	1.117	1.250	3.947	3.432	4.902	6.324	2.465
Peak flow (m ³ s ⁻¹)		26.43	31.78	17.90	12.19	11.92	74.33	11.06	28.81	17.44	26.86	30.35	59.93	74.33
Runoff (mm)		131	120	99	49	41	28	21	26	40	67	122	153	896
Rainfall (mm)		126	130	151	60	77	73	65	81	103	137	170	209	1382

Factors affecting flow regime: N
Station type: C1981 runoff is 122% of previous mean
rainfall 112%**057005 Taff at Pontypridd****1981**Measuring authority: WELS
First year: 1968Grid reference: ST 079897
Level stn. (m OD) 45.15Catchment area (sq km): 454.8
Max alt. (m OD) 886**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	16.830	16.840	72.660	10.650	17.900	14.230	5.240	4.057	22.720	36.020	28.180	21.580	22.242
(m ³ s ⁻¹)	Peak	113.90	167.00	365.10	27.65	74.57	65.33	10.03	7.29	279.20	184.50	190.00	118.80	365.10
Runoff (mm)		99	90	428	61	105	81	31	24	130	212	161	127	1548
Rainfall (mm)		106	124	460	63	190	82	45	31	337	285	199	165	2087

Monthly and yearly statistics for previous record (Oct 1970 to Dec 1980)

Mean	Avg	28.880	27.200	19.470	12.000	9.031	7.435	6.046	9.280	11.350	14.620	26.340	30.650	16.809
flows	Low	11.800	12.700	10.800	5.287	4.731	3.618	2.989	2.287	4.745	3.539	11.030	14.100	10.279
(m ³ s ⁻¹)	High	53.460	48.500	38.170	22.230	19.680	19.540	11.030	19.000	41.590	39.380	47.780	60.590	22.610
Peak flow (m ³ s ⁻¹)		267.10	219.00	183.20	126.80	112.80	124.60	86.21	210.30	153.30	231.80	335.70	652.00	652.00
Runoff (mm)		170	146	115	68	53	42	36	55	65	86	150	180	1166
Rainfall (mm)		221	159	148	84	98	89	93	131	156	140	205	221	1745

Factors affecting flow regime: S E
Station type: FVVA1981 runoff is 133% of previous mean
rainfall 120%**057008 Rhymney at Llanederyn****1981**Measuring authority: WELS
First year: 1972Grid reference: ST 225821
Level stn. (m OD) 11.78Catchment area (sq km): 178.7
Max alt. (m OD) 617**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	4.619	4.664	20.960	3.575	6.167	4.604	1.448	0.931	6.801	10.190	8.412	7.481	6.654
(m ³ s ⁻¹)	Peak	29.08	41.55	105.80	9.64	21.59	32.92	4.67	2.22	101.60	37.91	53.41	43.20	105.80
Runoff (mm)		69	63	314	52	92	67	22	14	99	153	122	112	1179
Rainfall (mm)		71	89	327	57	161	68	35	34	292	205	127	147	1608

Monthly and yearly statistics for previous record (Jan 1973 to Dec 1980)

Mean	Avg	7.769	8.815	6.038	3.404	2.305	1.499	1.394	2.044	3.377	4.540	6.643	8.338	4.660
flows	Low	3.313	3.199	3.064	1.841	1.302	0.873	0.602	0.571	0.914	0.748	2.355	3.218	2.903
(m ³ s ⁻¹)	High	12.830	15.670	9.863	5.079	3.587	2.163	2.332	3.812	11.500	13.700	12.560	15.730	6.203
Peak flow (m ³ s ⁻¹)		79.89	72.22	68.06	23.12	14.17	11.25	27.39	79.27	61.59	64.27	85.42	147.30	147.30
Runoff (mm)		116	120	90	49	35	22	21	31	49	68	96	125	823
Rainfall (mm)		147	131	112	54	71	55	75	97	138	109	139	157	1286

Factors affecting flow regime: P E
Station type: FVVA1981 runoff is 143% of previous mean
rainfall 125%

058001 Ogmore at Bridgend**1981**Measuring authority WELS
First year 1962Grid reference SS 904794
Level stn (m OD) 13 80Catchment area (sq km) 158 0
Max alt (m OD) 568**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows (m ³ s ⁻¹)	Avg	6 997	5 858	23 080	2 687	5 911	5 647	1 347	0 757	9 847	15 010	9 753	7 311	7 850
	Peak	29 42	50 01	168 00	13 53	29 67	35 37	3 41	3 27	152 00	85 26	46 27	20 37	168 00
Runoff (mm)		119	90	391	44	100	93	23	13	162	254	160	124	1572
Rainfall (mm)		111	99	385	47	199	89	52	34	352	328	168	152	2016

Monthly and yearly statistics for previous record (Oct 1963 to Dec 1980)

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Mean flows (m ³ s ⁻¹)	Avg	9 403	8 067	5 617	4 635	4 112	3 258	3 219	4 013	4 489	6 209	9 307	10 440	6 056
	Low	2 584	2 343	3 606	1 603	1 728	0 908	1 002	0 647	1 409	1 294	4 101	4 217	3 955
(m ³ s ⁻¹)	High	16 850	15 440	9 449	8 268	6 884	7 628	8 748	8 137	16 920	20 800	21 810	27 710	8 236
	Peak flow (m ³ s ⁻¹)	115 00	96 84	73 42	59 75	41 91	111 60	110 70	83 74	73 29	117 20	146 00	155 20	155 20
Runoff (mm)		159	125	95	76	70	53	55	68	74	105	153	177	1209
Rainfall (mm)		185	134	125	98	115	109	119	137	150	153	198	201	1719

Factors affecting flow regime P EI
Station type FVVA1981 runoff is 130% of previous mean
rainfall 117%**058006 Mellte at Pontneathvaughan****1981**Measuring authority WELS
First year 1971Grid reference SN 915082
Level stn (m OD) 29 10Catchment area (sq km) 65 8
Max alt (m OD) 734**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows (m ³ s ⁻¹)	Avg	2 772	2 851	10 670	1 437	3 184	1 979	0 478	0 329	3 617	6 305	5 016	3 263	3 492
	Peak	17 52	66 12	72 93	5 83	13 35	13 27	0 94	0 47	47 71	37 44	59 47	20 94	72 93
Runoff (mm)		113	105	434	57	130	78	19	13	142	257	198	133	1678
Rainfall (mm)		114	150	552	71	213	92	56	34	352	314	242	157	2347

Monthly and yearly statistics for previous record (Oct 1971 to Nov 1980—incomplete or missing months total 0 3 years)

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Mean flows (m ³ s ⁻¹)	Avg	4 521	4 224	3 180	1 921	1 527	0 997	1 058	1 549	2 275	2 320	4 651	5 158	2 774
	Low	1 932	2 567	1 442	0 497	0 394	0 322	0 318	0 248	0 567	0 548	2 859	2 641	1 985
(m ³ s ⁻¹)	High	8 274	7 231	6 082	3 812	3 169	3 559	2 608	3 357	6 876	5 520	7 875	8 739	3 814
	Peak flow (m ³ s ⁻¹)	54 62	45 27	41 12	39 02	21 45	32 54	39 14	58 52	35 54	57 57	79 67	127 60	127 60
Runoff (mm)		184	156	129	76	67	39	43	63	90	94	183	210	1330
Rainfall (mm)		237	169	157	95	108	99	108	143	162	154	235	246	1913

Factors affecting flow regime S P
Station type FVVA1981 runoff is 126% of previous mean
rainfall 123%**059001 Tawe at Ynys Tanglws****1981**Measuring authority WELS
First year 1957Grid reference SS 685998
Level stn (m OD) 9 31Catchment area (sq km) 227 7
Max alt (m OD) 802**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows (m ³ s ⁻¹)	Avg	4 427	5 182	33 830	1 571	6 043	4 911	2 532	1 896	17 940	25 230	16 460	11 130	10 929
	Peak	55 18	168 40	245 60	11 14	42 33	36 02	6 56	7 34	236 00	167 20	218 30	42 74	245 60
Runoff (mm)		52	55	398	18	71	56	30	22	204	297	187	131	1521
Rainfall (mm)		101	126	451	64	192	104	59	54	374	312	170	168	2175

Monthly and yearly statistics for previous record (Oct 1957 to Dec 1980—incomplete or missing months total 0 7 years)

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Mean flows (m ³ s ⁻¹)	Avg	18 710	14 400	10 010	8 770	7 441	4 973	5 271	7 456	9 584	12 200	16 530	17 920	11 089
	Low	1 479	2 445	3 175	2 145	1 650	1 354	1 311	1 280	0 574	2 587	8 358	3 931	7 613
(m ³ s ⁻¹)	High	36 580	29 040	23 370	15 370	17 980	15 960	9 480	14 700	26 290	43 430	33 320	43 650	15 158
	Peak flow (m ³ s ⁻¹)	275 10	322 80	176 10	188 60	147 50	214 10	131 90	261 80	286 30	314 30	290 60	461 30	461 30
Runoff (mm)		220	154	118	100	88	56	62	88	109	144	188	211	1537
Rainfall (mm)		201	141	125	115	114	108	120	140	159	177	206	214	1820

Factors affecting flow regime GEI
Station type VA1981 runoff is 99% of previous mean
rainfall 120%**060003 Taf at Clog-y-fran****1981**Measuring authority WELS
First year 1965Grid reference SN 238160
Level stn (m OD) 7 01Catchment area (sq km) 217 3
Max alt (m OD) 385**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows (m ³ s ⁻¹)	Avg	5 803	5 635	26 610	4 242	4 747	4 670	1 560	0 854	5 303	22 310	9 425	12 920	8 673
	Peak	18 40	23 55	85 73	8 82	16 19	17 79	2 43	1 70	58 02	84 98	32 18	63 59	85 73
Runoff (mm)		72	63	328	51	59	56	19	11	63	275	112	159	1267
Rainfall (mm)		60	93	365	54	143	64	49	26	267	271	109	149	1650

Monthly and yearly statistics for previous record (Oct 1965 to Dec 1980—incomplete or missing months total 0 6 years)

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Mean flows (m ³ s ⁻¹)	Avg	13 340	12 180	7 256	5 538	4 080	2 686	1 840	2 434	3 805	8 284	11 460	13 720	7 196
	Low	4 835	5 454	3 796	2 267	1 441	0 814	0 527	0 363	0 983	1 018	4 587	9 027	4 672
(m ³ s ⁻¹)	High	25 900	27 200	12 410	11 800	7 483	8 821	5 330	4 785	15 340	19 960	22 690	25 520	9 662
	Peak flow (m ³ s ⁻¹)	73 43	73 97	51 13	60 03	31 15	45 11	19 86	32 90	53 11	79 05	80 82	65 55	80 82
Runoff (mm)		164	136	89	66	50	32	23	30	45	102	137	169	1045
Rainfall (mm)		165	117	101	83	84	77	76	99	118	151	155	172	1398

Factors affecting flow regime N
Station type VA1981 runoff is 121% of previous mean
rainfall 118%

061003 Gwaun at Cilrhedyn Bridge**1981**Measuring authority: WELS
First year: 1968Grid reference: SN 005349
Level stn. (m OD) 70.31Catchment area (sq km) 31.3
Max alt. (m OD) 468**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.859	0.751	3.668	0.680	0.706	0.807	0.308	0.185	0.840	3.462	1.377	1.586	1.269
(m ³ s ⁻¹)	Peak	3.23	2.83	16.70	2.04	2.99	3.15	0.81	1.09	15.64	13.05	6.12	11.95	16.70
Runoff (mm)		73	58	314	56	60	67	26	16	70	296	114	136	1287
Rainfall (mm)		69	94	346	63	134	72	66	38	256	308	115	178	1739

Monthly and yearly statistics for previous record (Apr 1969 to Dec 1980—incomplete or missing months total 0.1 years)

Mean	Avg	2.004	1.892	1.196	0.795	0.570	0.499	0.299	0.568	0.575	1.102	1.809	1.971	1.103
Flows	Low	0.887	0.790	0.576	0.352	0.231	0.191	0.116	0.073	0.288	0.271	1.080	1.487	0.802
(m ³ s ⁻¹)	High	3.898	4.108	1.801	1.298	1.248	1.600	0.712	1.366	1.630	2.674	3.080	2.851	1.392
Peak flow (m ³ s ⁻¹)		22.52	21.10	9.04	13.51	7.23	18.35	5.56	23.48	6.56	16.13	20.03	20.59	23.48
Runoff (mm)		171	148	102	66	49	41	26	49	48	94	150	169	1112
Rainfall (mm)*		196	143	118	77	71	60	82	103	149	182	163	181	1525

*(1974-1980)

Factors affecting flow regime:
Station type: VA1981 runoff is 116% of previous mean
rainfall 114%**063001 Ystwyth at Pont Llolwyn****1981**Measuring authority: WELS
First year: 1963Grid reference: SN 591774
Level stn. (m OD) 11.98Catchment area (sq km) 169.6
Max alt. (m OD) 611**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	9.564	5.896	18.470	1.950	4.905	2.818	2.422	1.724	8.534	19.800	8.850	7.893	7.736
(m ³ s ⁻¹)	Peak	43.91	32.67	126.70	8.92	23.72	18.45	27.63	22.31	54.16	82.43	65.78	38.07	126.70
Runoff (mm)		151	84	292	30	77	43	38	27	130	313	135	125	1446
Rainfall (mm)		134	89	320	57	133	66	96	66	238	308	136	170	1763

Monthly and yearly statistics for previous record (Oct 1963 to Nov 1980—incomplete or missing months total 0.2 years)

Mean	Avg	8.939	7.476	5.310	4.447	3.638	2.467	2.600	3.368	3.880	6.302	9.417	11.030	5.734
Flows	Low	2.268	2.283	2.901	0.961	0.583	0.625	0.427	0.181	0.882	0.535	4.069	2.219	3.783
(m ³ s ⁻¹)	High	15.110	15.700	12.440	10.080	10.100	6.012	5.461	6.934	10.670	14.930	18.320	27.600	7.737
Peak flow (m ³ s ⁻¹)		105.60	88.63	84.88	90.32	105.10	129.70	68.24	174.30	71.02	129.90	128.10	210.40	210.40
Runoff (mm)		141	108	84	68	57	38	41	53	59	100	144	174	1087
Rainfall (mm)		150	108	103	86	96	86	99	104	122	135	169	177	1435

Factors affecting flow regime:
Station type: VA1981 runoff is 136% of previous mean
rainfall 123%**064001 Dovey at Dovey Bridge****1981**Measuring authority: WELS
First year: 1962Grid reference: SH 745019
Level stn. (m OD) 5.89Catchment area (sq km) 471.3
Max alt. (m OD) 905**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	36.580	24.480	75.790	5.801	17.900	15.300	4.868	2.392	21.650	64.830	44.260	20.620	27.456
(m ³ s ⁻¹)	Peak	283.60	315.70	360.70	13.67	46.27	101.60	41.71	9.88	166.90	344.00	355.70	100.00	360.70
Runoff (mm)		208	176	431	32	73	84	28	14	119	368	243	117	1843
Rainfall (mm)		183	130	437	56	140	112	94	59	271	369	211	123	2185

Monthly and yearly statistics for previous record (Oct 1962 to Jan 1974—incomplete or missing months total 2.8 years)

Mean	Avg	29.530	23.170	20.530	20.470	15.070	11.240	9.573	12.720	16.750	25.870	33.240	44.370	21.885
Flows	Low	6.245	5.174	11.770	8.288	5.643	2.518	3.350	6.944	6.595	10.770	17.940	7.501	18.588
(m ³ s ⁻¹)	High	64.210	46.080	40.020	42.490	23.600	21.770	14.090	24.050	28.780	76.960	62.790	88.780	25.620
Peak flow (m ³ s ⁻¹)		350.20	340.00	317.80	271.30	337.20	402.10	162.00	187.30	254.90	337.90	375.50	580.50	580.50
Runoff (mm)		168	119	117	113	86	62	54	72	92	147	183	257	1465
Rainfall (mm)*		183	131	136	117	115	105	112	132	160	161	215	231	1798

*(1962-1980)
Factors affecting flow regime: N
Station type: VA1981 runoff is 126% of previous mean
rainfall 122%**065005 Erch at Pencaenewydd****1981**Measuring authority: WELS
First year: 1972Grid reference: SH 400404
Level stn. (m OD) 56.13Catchment area (sq km) 18.1
Max alt. (m OD) 564**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.698	0.487	1.804	0.432	0.371	0.539	0.216	0.131	0.613	1.736	0.912	0.832	0.731
(m ³ s ⁻¹)	Peak	3.71	2.57	19.78	2.84		6.99	0.88	0.21	7.42	11.84	13.37	5.43	
Runoff (mm)		103	65	267	62	55	77	32	19	88	257	131	123	1279
Rainfall (mm)		88	56	303	87	120	98	63	45	235	283	151	95	1624

Monthly and yearly statistics for previous record (Jan 1973 to Dec 1980)

Mean	Avg	0.963	1.009	0.609	0.424	0.354	0.148	0.140	0.245	0.387	0.642	1.018	1.023	0.578
Flows	Low	0.629	0.414	0.408	0.177	0.135	0.089	0.104	0.067	0.167	0.236	0.593	0.600	0.430
(m ³ s ⁻¹)	High	1.396	1.869	0.893	0.892	0.728	0.252	0.230	0.504	0.919	1.053	1.301	1.616	0.698
Peak flow (m ³ s ⁻¹)		10.25	15.45	6.31	8.73	4.68	0.80	3.87	5.35	6.00	10.70	10.82	10.45	15.45
Runoff (mm)		143	136	90	61	52	21	21	36	55	95	146	151	1008
Rainfall (mm)		140	110	93	59	72	54	78	94	122	128	154	143	1247

Factors affecting flow regime: N
Station type: C1981 runoff is 127% of previous mean
rainfall 130%

066006 Elwy at Pont-y-gwyddel**1981**Measuring authority WELS
First year 1972Grid reference SH 952718
Level stn (m OD) 87.90Catchment area (sq km) 194.0
Max alt (m OD) 518**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	5.405	6.276	11.520	1.505	1.621	1.260	1.068	0.569	3.423	11.090	9.218	6.761	4.976
(m ³ s ⁻¹)	Peak	20.11	50.82	76.59	4.08	5.75	4.39	13.30	0.93	54.16	53.23	101.60	30.66	101.60
Runoff (mm)		75	78	159	20	22	17	15	8	46	153	123	93	809
Rainfall (mm)		84	101	215	36	72	68	78	34	199	193	151	105	1336

Monthly and yearly statistics for previous record (Dec 1973 to Dec 1980)

Mean	Avg	8.032	7.476	4.945	2.565	1.621	1.254	0.628	1.156	2.689	4.928	7.022	7.616	4.141
Flows	Low	4.628	4.079	1.539	0.873	0.479	0.359	0.318	0.247	0.630	1.733	2.757	4.879	2.908
(m ³ s ⁻¹)	High	11.430	12.050	11.950	4.722	2.960	3.300	1.383	4.351	7.450	11.530	11.590	14.450	5.094
Peak flow (m ³ s ⁻¹)		82.42	50.53	55.10	25.01	21.53	14.95	5.32	35.15	58.57	143.00	53.44	75.42	143.00
Runoff (mm)		111	93	68	34	22	17	9	16	36	68	94	105	674
Rainfall (mm)		136	101	89	58	72	73	75	89	136	121	148	143	1243

Factors affecting flow regime SRP
Station type VA1981 runoff is 120% of previous mean
rainfall 107%**067008 Alyn at Pont-y-capel****1981**Measuring authority WELS
First year 1965Grid reference SJ 336541
Level stn (m OD) 37.29Catchment area (sq km) 227.1
Max alt (m OD) 562**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	4.515	4.192	5.440	1.638	1.393	1.071	0.667	0.601	0.817	3.973	2.634	4.696	2.636
(m ³ s ⁻¹)	Peak	18.53	14.96	14.85	3.30	3.45	8.14	1.79	1.47	4.96	10.05	13.78	13.95	18.53
Runoff (mm)		53	45	64	19	16	12	8	7	9	47	30	55	366
Rainfall (mm)		91	92	121	40	76	51	51	50	121	143	87	117	1040

Monthly and yearly statistics for previous record (Jun 1965 to Dec 1980)

Mean	Avg	4.150	4.396	3.375	2.443	1.813	1.181	0.956	0.915	1.087	2.025	3.043	4.365	2.471
Flows	Low	1.753	2.088	1.465	1.023	0.741	0.438	0.331	0.287	0.474	0.452	0.614	1.246	1.266
(m ³ s ⁻¹)	High	7.219	9.085	8.027	5.573	5.657	2.873	2.098	2.244	3.906	6.896	5.816	9.481	3.027
Peak flow (m ³ s ⁻¹)		26.73	28.52	26.11	21.09	26.86	18.34	23.23	18.07	59.11	21.90	28.21	35.92	59.11
Runoff (mm)		49	47	40	28	21	13	11	11	12	24	35	51	343
Rainfall (mm)		86	73	72	58	73	63	66	69	84	80	105	97	926

Factors affecting flow regime E1
Station type CC1981 runoff is 107% of previous mean
rainfall 112%**067025 Clywedog at Bowling Bank****1981**Measuring authority WELS
First year 1976Grid reference SJ 396483
Level stn (m OD) 14.00Catchment area (sq km) 98.6
Max alt (m OD) 460**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	2.349	2.313	2.760	1.085	1.151	0.976	0.594	0.622	0.777	1.972	1.483	2.491	1.548
(m ³ s ⁻¹)	Peak	10.07	14.58	11.70	3.42	4.29	7.78	2.88	4.31	5.04	7.48	6.30	8.84	14.58
Runoff (mm)		64	57	75	29	31	26	16	17	20	54	39	68	485
Rainfall (mm)		81	84	110	42	85	44	41	53	114	124	71	104	953

Monthly and yearly statistics for previous record (Jan 1976 to Dec 1980)

Mean	Avg	2.243	2.903	2.236	1.392	1.103	0.957	0.614	0.642	0.872	1.240	1.264	2.644	1.503
Flows	Low	1.374	1.376	1.167	0.778	0.596	0.473	0.431	0.362	0.512	0.580	0.989	1.589	1.275
(m ³ s ⁻¹)	High	2.934	4.475	3.669	2.671	1.649	1.358	0.705	0.832	2.057	3.176	1.740	4.039	1.708
Peak flow (m ³ s ⁻¹)		13.50	19.44	13.54	9.06	7.89	7.24	4.29	4.02	47.84	16.97	4.75	25.62	47.84
Runoff (mm)		61	72	61	37	30	25	17	17	23	34	33	72	481
Rainfall (mm)														

Factors affecting flow regime GE
Station type C

1981 runoff is 103% of previous mean

068003 Dane at Rudheath**1981**Measuring authority NWWA
First year 1949Grid reference SJ 668718
Level stn (m OD) 13.19Catchment area (sq km) 407.1
Max alt (m OD) 547**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	15.330	7.916	12.210	4.776	4.633	3.495	3.886	2.406	3.879	11.380	9.840	10.030	7.898
(m ³ s ⁻¹)	Peak	114.80	46.82	134.00	21.37	16.74	18.56	82.83	9.21	43.39	52.17	102.90	80.65	134.00
Runoff (mm)		101	47	113	30	30	22	26	16	25	75	63	66	814
Rainfall (mm)		101	60	132	52	78	50	63	68	112	134	92	69	1011

Monthly and yearly statistics for previous record (Oct 1949 to Sep 1975—incomplete or missing months total 0.1 years)

Mean	Avg	6.528	5.748	4.019	3.728	2.863	2.356	2.760	3.657	3.809	4.166	6.387	7.308	4.438
Flows	Low	2.183	1.545	1.277	0.988	0.720	0.746	0.734	0.654	0.633	0.877	1.396	1.803	2.333
(m ³ s ⁻¹)	High	11.970	12.760	13.190	8.144	7.335	6.864	8.012	14.360	11.920	14.350	16.290	22.920	8.682
Peak flow (m ³ s ⁻¹)		56.35	65.24	67.11	51.40	63.60	41.96	57.18	67.96	84.20	66.26	58.05	92.78	92.78
Runoff (mm)		43	34	26	24	19	15	18	24	24	27	41	48	344
Rainfall (mm)		76	62	58	57	64	69	79	87	81	75	89	87	884

Factors affecting flow regime S PGE1
Station type VA1981 runoff is 178% of previous mean
rainfall 114%

068020 Gowy at Bridge Trafford**1981**Measuring authority NWWA
First year: 1979Grid reference SJ 448711
Level stn (m OD) 4.06Catchment area (sq km): 156.0
Max alt. (m OD): 222**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	2 354	2 068	3 022	0 813	0 679	0 905	0 800	2 509	0 906	3 407	2 498	3 837	1 983
(m ³ s ⁻¹)	Peak	16 03	31 61	21 14	3 21	1 55	18 42	5 77	38 39	8 96	29 52	34 03	27 31	38 39
Runoff (mm)		40	32	52	14	12	15	14	43	15	58	42	66	402
Rainfall (mm)														

Factors affecting flow regime: PG
Station type: FV

1981 runoff is % of previous mean

069002 Irwell at Adelphi Weir**1981**Measuring authority NWWA
First year: 1949Grid reference SJ 824987
Level stn (m OD) 24.15Catchment area (sq km): 559.4
Max alt. (m OD): 473**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	36 930	19 870	48 030	12 750	12 910	10 850	7 518	9 524	16 890	38 520	33 080	18 210	22 049
(m ³ s ⁻¹)	Peak	277 80	295 60	42 87	35 77	56 98	18 88	57 58	141 50	174 40	279 70	101 80		
Runoff (mm)		177	86	230	57	62	50	36	46	78	184	153	87	1246
Rainfall (mm)		162	88	256	74	101	69	63	84	173	230	169	81	1550

Monthly and yearly statistics for previous record (Oct 1949 to Dec 1980—incomplete or missing months total 2.0 years)

Mean	Avg	24 010	22 790	15 940	14 230	12 140	10 060	11 890	16 680	17 240	20 250	25 300	30 020	18 388
Flows	Low	3 705	4 787	7 803	5 408	4 348	2 750	4 031	3 676	2 991	4 990	7 534	7 469	10 469
(m ³ s ⁻¹)	High	40 260	67 230	29 290	27 070	21 530	18 900	26 150	56 000	43 480	52 510	51 100	84 660	30 489
Peak flow (m ³ s ⁻¹)		430 40	400 30	235 00	156 20	141 60	238 00	385 60	395 70	390 80	485 10	334 90	419 50	485 10
Runoff (mm)		115	99	76	66	58	47	57	80	80	97	117	144	1036
Rainfall (mm)		115	87	81	78	81	84	106	124	120	118	132	136	1262

Factors affecting flow regime: S PGEI
Station type: B1981 runoff is 120% of previous mean
rainfall 123%**069003 Irk at Scotland Weir****1981**Measuring authority NWWA
First year: 1949Grid reference SJ 841992
Level stn (m OD) 26.21Catchment area (sq km): 72.5
Max alt. (m OD): 213**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	3 439	2 322	4 539	1 994	1 775	1 640	1 620	1 561	2 421	3 701	3 966	2 587	2 630
(m ³ s ⁻¹)	Peak	17 83	34 88	25 71	13 97	9 58	10 76	8 55	12 89	33 75	20 19	37 07	13 58	37 07
Runoff (mm)		127	77	168	71	66	59	60	58	87	137	142	96	1146
Rainfall (mm)		127	68	189	47	76	53	51	81	140	192	134	66	1219

Monthly and yearly statistics for previous record (Oct 1937 to Dec 1980—incomplete or missing months total 13.8 years)

Mean	Avg	2 237	2 217	1 777	1 598	1 446	1 451	1 516	1 854	1 785	1 942	2 323	2 464	1 883
Flows	Low	0 582	0 595	0 470	0 701	0 543	0 431	0 672	0 374	0 297	0 521	0 715	0 876	0 834
(m ³ s ⁻¹)	High	3 682	6 529	3 900	3 794	2 641	2 855	2 794	4 589	4 529	4 759	5 006	5 744	3 092
Peak flow (m ³ s ⁻¹)		45 31	43 89	42 48	46 12	28 78	72 92	50 97	45 31	55 22	62 87	39 64	55 49	72 92
Runoff (mm)		83	75	66	57	53	52	56	69	64	72	83	91	819
Rainfall (mm)		92	68	69	65	70	75	92	105	100	96	108	108	1048

Factors affecting flow regime: S PGEI
Station type: CB1981 runoff is 140% of previous mean
rainfall 116%**069006 Bollin at Dunham Massey****1981**Measuring authority NWWA
First year: 1955Grid reference SJ 727875
Level stn (m OD) 12.80Catchment area (sq km): 256.0
Max alt. (m OD): 483**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	10 240	6 190	11 470	3 587	3 151	2 143	2 545	4 722	3 575	11 340	9 425	7 574	6 289
(m ³ s ⁻¹)	Peak	33 10	31 28	36 91	9 96	7 55	9 35	25 78	41 47	26 75	39 55	43 46	29 74	43 46
Runoff (mm)		107	58	120	36	33	22	27	44	36	119	95	79	777
Rainfall (mm)		105	60	147	44	69	44	76	94	113	164	117	70	1103

Monthly and yearly statistics for previous record (Oct 1955 to Dec 1980—incomplete or missing months total 1.1 years)

Mean	Avg	5 836	5 532	3 933	3 409	2 861	2 254	2 316	2 885	3 200	3 695	5 043	6 012	3 907
Flows	Low	1 639	1 686	1 694	1 742	1 286	0 707	0 875	0 464	0 651	1 300	1 804	2 296	2 728
(m ³ s ⁻¹)	High	8 567	12 880	7 138	8 732	5 781	5 953	5 626	11 410	8 963	8 603	9 391	14 510	5 595
Peak flow (m ³ s ⁻¹)		43 95	39 29	36 21	60 43	63 02	34 19	41 50	39 64	35 05	41 18	44 35	46 19	63 02
Runoff (mm)		61	53	41	35	30	23	24	30	32	39	51	63	482
Rainfall (mm)		78	60	56	56	66	71	83	90	85	77	83	86	891

Factors affecting flow regime: S PGEI
Station type: VA1981 runoff is 161% of previous mean
rainfall 124%

069007 Mersey at Ashton Weir

1981

Measuring authority NWWA				Grid reference SJ 772936				Catchment area (sq km) 660.0						
First year 1958				Level stn (m OD) 14.87				Max alt (m OD) 636						
Hydrometric statistics for 1981														
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	29 210	14 240	36 210	9 480	9 120	5 133	4 945	8 017	9 001	25 510	25 190	13 830	15 824
	Peak	176 90	105 10	176 70		27 37	20 50	20 69	102 60	81 76	202 50	303 70	55 56	
Runoff (mm)		119	52	147	37	37	20	20	33	35	104	99	56	759
Rainfall (mm)		146	86	209	77	83	55	80	98	134	204	155	94	1421
Factors affecting flow regime S PGEI												1981 runoff is 157% of previous mean		
Station type CB														

069015 Etherow at Compstall

1981

Measuring authority NWWA		Grid reference SJ 967908										Catchment area (sq km) 156.0		
First year 1969		Level stn (m OD) 73.49										Max alt (m OD) 628		
Hydrometric statistics for 1981														
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	8 964	3 669	9 057	2 308	2 335	0 835	0 900	1 093	1 424	6 328	6 368	2 879	3 847
	Peak	35 03	29 79	37 56	13 93	7 17	5 86	5 83	7 83	20 45	33 34	35 83	12 02	37 56
Runoff (mm)		154	57	156	38	40	14	15	19	24	109	106	49	780
Rainfall (mm)		197	98	262	94	94	64	88	94	147	228	183	92	1641
Monthly and yearly statistics for previous record (Jan 1977 to Dec 1980—incomplete or missing months total 0.3 years)														
Mean	Avg	4 673	5 659	5 841	2 962	2 685	1 758	1 476	2 068	1 977	3 614	5 312	5 236	3 596
flows	Low	3 933	2 141	3 392	1 291	0 540	1 258	1 161	0 965	1 178	1 264	2 990	3 947	3 111
	High	5 419	8 539	10 080	5 445	4 870	2 997	1 993	3 572	2 692	9 424	7 471	7 522	4 169
Peak flow (m/s)		26 05	44 46	46 03	27 50	18 79	24 95	15 27	24 43	37 45	42 12	34 44	62 95	82 95
Runoff (mm)		80	89	100	49	46	29	25	35	33	62	88	90	728
Rainfall (mm)		146	144	144	10	29	183	99	165	116	295	181	145	1657
Factors affecting flow regime S PGEI														
Station type C		1981 runoff is 107% of previous mean rainfall 99%												

070004 Yarrow at Croston Mill

1981

Measuring authority NWWA		Grid reference SD 498180										Catchment area (sq km) 74.4		
First year 1973		Level stn (m OD) 6.85										Max alt (m OD) 456		
Hydrometric statistics for 1981														
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	4 917	2 439	7 574	1 113	1 153	1 173	0 747	0 951	2 062	5 566	3 678	2 494	2 818
	Peak	30 04	18 27	93 13	11 21	11 78	13 88	2 30	6 84	28 57	21 02	30 85	11 38	93 13
Runoff (mm)		177	79	273	39	42	41	27	34	72	200	176	90	1200
Rainfall (mm)		129	69	211	55	101	70	59	72	155	194	122	74	1311
Monthly and yearly statistics for previous record (Jan 1976 to Dec 1980)														
Mean	Avg	2 838	2 685	2 177	1 040	1 137	0 753	0 678	0 882	0 909	2 543	2 774	3 111	1 792
flows	Low	1 491	1 108	1 366	0 586	0 508	0 405	0 494	0 379	0 628	0 854	1 611	1 756	1 251
	High	3 990	4 917	3 236	1 866	2 577	0 958	0 971	1 352	1 434	6 360	4 485	4 853	2 589
Peak flow (m/s)		33.44	20.17	18.51	12.56	13.69	6.62	11.69	15.84	18.51	89.38	33.83	34.28	89.38
Runoff (mm)		102	89	78	36	41	26	24	32	32	92	97	112	761
Rainfall (mm)														
Factors affecting flow regime S PGEI		1981 runoff is 158% of previous mean												
Station type MIS														

071004 Calder at Whalley Weir

1981

Measuring authority NWWA		Grid reference SD 729360										Catchment area (sq km) 316.0			
First year 1961		Level stn (m OD) 39.85										Max alt (m OD) 558			
Hydrometric statistics for 1981															
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year	
Flows	Avg	18 870	10 040	25 320	6 233	5 613	6 191	3 272	4 449	10 710	21 070	16 670	9 099	11 457	
	Peak	147 70	146 10	185 20		22 58	49 67	15 95	43 01	123 60	117 30	138 30	63 46		
Runoff (mm)		160	77	215	51	48	51	28	38	88	178	137	77	1146	
Rainfall (mm)		147	88	248	60	88	81	60	77	186	208	157	78	1478	
Monthly and yearly statistics for previous record (Oct 1963 to Dec 1980—incomplete or missing months total 2.6 years)															
Mean	Avg	12 010	10 090	7 918	6 284	5 510	3 846	3 938	5 930	7 756	10 580	13 290	13 400	8 373	
flows	Low	5 766	3 320	3 989	2 772	2 053	1 888	1 773	1 564	2 065	2 397	6 958	4 886	6 197	
	High	18 010	17 170	17 100	13 010	9 916	7 155	9 059	16 280	18 620	23 910	21 990	25 610	10 946	
Peak flow (m/s)		183 20	135 80	344 20	108 40	91 66	135 50	230 60	141 90	206 00	229 50	615 00	194 30	615 00	
Runoff (mm)		102	78	67	52	47	32	33	50	64	90	109	114	836	
Rainfall (mm)		115	85	89	75	83	81	92	102	119	116	135	124	1216	
Factors affecting flow regime EI												1981 runoff is 137% of previous mean			
Station type: FV												rainfall 122%			

071010 Pendle Water at Barden Lane**1981**Measuring authority: NWWA
First year: 1971Grid reference: SD 837351
Level stn (m OD) 92.28Catchment area (sq km) 108.0
Max alt (m OD) 557**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	6 058	3 385	8 577	1 875	1 544	2 000	0 921	1 202	3 171	6 610	5 619	2 663	3 635
(m ³ s ⁻¹)	Peak	46 01	79 00	83 69	11 29	9 07	17 52	5 21	10 99	52.80	63 28	59 20	20 97	83 69
Runoff (mm)		150	76	213	45	38	48	23	30	76	164	135	66	1064
Rainfall (mm)														

Monthly and yearly statistics for previous record (Jan 1977 to Dec 1978)

Mean	Avg	3 667	3 805	3 262	2 262	1 330	1 074	0 867	1 306	2 667	2 220	4 327	4 058	2 561
flows	Low	3 033	2 794	2 392	1 272	0 828	0 688	0 745	0 896	1 637	1 580	3 356	3 042	2 516
(m ³ s ⁻¹)	High	4 301	4 817	4 133	3 252	1 833	1 461	0 990	1 717	3 698	2 860	5 298	5 075	2 605
Peak flow (m ³ s ⁻¹)		32.35	18.97	59.01	39.92	10.60	15.29	16.00	37.95	67.37	81.61	78.54	50.30	81.61
Runoff (mm)		91	85	81	54	33	26	22	32	64	55	104	101	748
Rainfall (mm)														

Factors affecting flow regime: S EI
Station type: FV

1981 runoff is 142% of previous mean

072002 Wyre at St Michaels**1981**Measuring authority: NWWA
First year: 1962Grid reference: SD 463411
Level stn (m OD) 4.36Catchment area (sq km) 275.0
Max alt (m OD) 560**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	14 570	6 429	25 920	3 653	3 760	5 186	4 910	5 152	11 210	20 070	13 070	9 379	10 276
(m ³ s ⁻¹)	Peak	70 06	79 05	168 90	21 66	40 08	43 91	57 72	85 06	128 10	120 50	93 42	41 59	168 90
Runoff (mm)		142	57	252	34	37	49	48	50	106	196	123	91	1185
Rainfall (mm)		162	68	281	54	97	95	93	99	211	217	157	69	1603

Monthly and yearly statistics for previous record (Oct 1963 to Dec 1980—incomplete or missing months total 0.2 years)

Mean	Avg	8 531	7 304	5 720	4 798	3 466	2 690	2 909	4 432	6 472	8 430	10 060	10 030	6 232
flows	Low	3 983	1 746	2 270	0 774	0 732	0 444	0 460	0 249	0 902	0 617	4 859	2 581	3 186
(m ³ s ⁻¹)	High	14 780	16 030	11 120	12 090	10 450	7 096	5 690	16 240	13 290	25 500	15 630	19 400	9 952
Peak flow (m ³ s ⁻¹)		148 20	145 60	152 40	123 00	128 20	146 60	96 89	162 10	138 60	180 40	159 00	165 60	180 40
Runoff (mm)		83	65	56	45	34	25	28	43	61	82	95	98	715
Rainfall (mm)		113	77	84	73	80	89	94	108	134	130	139	122	1243

Factors affecting flow regime: S PG
Station type: FV1981 runoff is 166% of previous mean
rainfall 129%**072004 Lune at Caton****1981**Measuring authority: NWWA
First year: 1968Grid reference: SD 529653
Level stn (m OD) 10.66Catchment area (sq km) 983.0
Max alt (m OD) 736**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	56 680	34 890	113 800	15 230	16 170	33 020	14 040	11 410	52 200	72 610	75 800	23 180	43 253
(m ³ s ⁻¹)	Peak	302 80	674 50	650 20	74 26	155 70	213 50	115 80	88 30	395 10	536 00	541 50	130 20	674 50
Runoff (mm)		154	86	310	40	44	87	38	31	138	198	200	63	1390
Rainfall (mm)														

Monthly and yearly statistics for previous record (Jan 1959 to Dec 1976)

Mean	Avg	49 540	37 310	29 290	31 260	19 980	14 850	19 890	26 360	33 160	39 800	50 070	53 270	33 721
flows	Low	6 621	3 840	11 830	4 202	2 565	3 387	4 980	2 165	2 791	4 312	27 220	18 730	24 696
(m ³ s ⁻¹)	High	81 700	76 630	72 890	67 970	39 670	49 180	41 480	69 640	63 650	134 400	97 270	93 770	46 501
Peak flow (m ³ s ⁻¹)		591 40	108 10	165 40	94 39	228 20	212 70	281 40	83 56	322 70	284 70	364 20	149 00	591 40
Runoff (mm)		135	93	80	82	54	39	54	72	87	108	137	145	1082
Rainfall (mm)		144	96	110	96	94	93	113	133	152	136	164	148	1479

Factors affecting flow regime: SRP
Station type: CB

1981 runoff is 128% of previous mean

073002 Crake at Low Nibthwaite**1981**Measuring authority: NWWA
First year: 1963Grid reference: SD 294882
Level stn (m OD) 38.56Catchment area (sq km) 73.0
Max alt (m OD) 803**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	8 646	3 507	9 085	1 868	2 485	4 773	2 148	1 601	5 452	9 270	7 666	3 687	4 974
(m ³ s ⁻¹)	Peak	25 64	6 78	19 73	5 31	3 54	8 57	5 84	3 19	17 11	23 16	16 05	11 54	25 64
Runoff (mm)		317	116	333	66	91	152	79	59	194	340	272	135	2155
Rainfall (mm)		265	117	348	70	131	150	154	107	356	341	317	108	2469

Monthly and yearly statistics for previous record (Oct 1963 to Dec 1980—incomplete or missing months total 1.4 years)

Mean	Avg	5 632	4 688	3 569	3 473	2 426	1 897	1 947	2 847	4 052	5 523	5 940	6 026	3 998
flows	Low	2 306	1 463	1 656	0 882	0 255	0 222	0 745	0 292	0 330	2 256	2 394	2 454	2 928
(m ³ s ⁻¹)	High	10 410	8 201	7 999	6 017	4 841	5 372	3 874	5 672	6 533	12 960	9 030	9 896	4 877
Peak flow (m ³ s ⁻¹)		18 95	17 44	14 66	13 91	12 13	8 24	11 50	11 11	14 29	30 01	21 51	29 49	30 01
Runoff (mm)		207	157	131	123	89	67	71	104	144	203	211	221	1729
Rainfall (mm)		220	138	171	124	123	124	139	169	217	225	246	227	2123

Factors affecting flow regime: S
Station type: VA1981 runoff is 125% of previous mean
rainfall 116%

073005 Kent at Sedgwick

1981

Measuring authority NWWA Grid reference SD 509874 Catchment area (sq km) 209.0
First year 1968 Level stn (m OD) 18.90 Max alt (m OD) 820

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	12.680	8.160	22.750	3.350	4.612	9.278	3.356	2.261	11.370	17.940	15.010	5.466	9.688
	Peak	53.81	109.40	166.10	7.05	27.60	40.19	17.83	8.10	83.24	120.10	85.54	19.31	166.10
Runoff (mm)		162	94	292	42	59	115	43	29	141	230	186	70	1463
Rainfall (mm)		159	105	329	52	123	147	101	52	315	276	249	74	1982

Monthly and yearly statistics for previous record (Nov 1968 to Dec 1980)

Mean	Avg	11.780	9.931	7.892	6.870	3.923	3.407	3.401	5.537	8.199	8.610	14.050	12.350	7.980
Flows	Low	7.521	4.529	3.893	2.038	1.222	0.872	1.813	0.820	1.753	1.396	6.865	5.671	5.996
	High	20.820	16.800	15.980	12.620	6.969	13.010	8.291	10.920	15.310	16.440	20.300	22.360	10.316
Peak flow (m ³ s ⁻¹)		148.70	114.00	88.80	111.10	32.89	72.86	94.65	63.72	120.70	123.50	175.00	139.00	175.00
Runoff (mm)		151	116	101	85	50	42	44	71	102	110	174	158	1205
Rainfall (mm)		188	114	134	95	84	100	112	128	179	157	216	177	1684

Factors affecting flow regime 1981 runoff is 121% of previous mean
Station type CBVA rainfall 118%

073008 Bela at Beetham

1981

Measuring authority NWWA Grid reference SD 496806 Catchment area (sq km) 131.0
First year 1969 Level stn (m OD) 10.90 Max alt (m OD) 338

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	6.209	4.017	13.390	1.877	1.446	3.381	1.235	1.136	4.098	8.437	7.999	3.786	4.709
	Peak	16.77	30.93	55.47	4.37	6.90	23.15	4.23	6.78	20.67	39.75	32.46	10.98	65.47
Runoff (mm)		127	74	274	37	30	67	25	23	81	173	158	67	1136
Rainfall (mm)		119	76	314	42	93	106	81	66	236	212	176	57	1678

Monthly and yearly statistics for previous record (Aug 1969 to Dec 1976—incomplete or missing months total 1.3 years)

Mean	Avg	5.231	4.193	2.172	3.169	1.312	1.546	1.316	1.561	2.731	3.234	5.006	4.061	2.950
Flows	Low	2.508	3.088	1.495	0.888	0.574	0.483	0.534	0.501	0.807	1.091	3.022	1.589	2.193
	High	8.086	5.609	2.827	6.852	2.246	5.799	3.731	4.498	5.469	4.541	8.901	7.752	3.580
Peak flow (m ³ s ⁻¹)		37.59	23.93	16.28	46.13	8.40	23.93	25.61	21.46	27.35	25.06	27.48	25.61	46.13
Runoff (mm)		107	78	44	63	27	31	27	32	54	66	99	83	711
Rainfall (mm)		127	92	92	71	68	83	95	111	128	110	166	127	1265

Factors affecting flow regime 1981 runoff is 160% of previous mean
Station type FV rainfall 125%

074001 Duddon at Duddon Hall

1981

Measuring authority NWWA Grid reference SD 196896 Catchment area (sq km) 78.2
First year 1968 Level stn (m OD) 14.79 Max alt (m OD) 833

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	9.298	3.118	10.480	1.617	2.770	4.734	3.912	3.090	8.521	9.205	9.471	2.921	5.761
	Peak	135.40	28.68	67.31	11.50	29.31	37.60	47.27	56.92	123.40	100.80	76.64	29.31	135.40
Runoff (mm)		318	96	359	54	95	157	134	106	282	315	314	100	2331
Rainfall (mm)		321	125	373	82	132	198	197	140	367	354	324	129	2742

Monthly and yearly statistics for previous record (Mar 1968 to Dec 1980)

Mean	Avg	7.483	5.626	4.571	3.812	2.007	1.886	2.562	3.207	5.411	6.675	7.636	6.825	4.804
Flows	Low	3.921	2.651	1.701	0.497	0.324	0.547	0.639	0.402	0.560	1.416	4.227	3.041	3.351
	High	14.210	13.390	9.337	9.096	3.735	5.817	5.034	6.847	8.416	15.160	13.160	10.740	6.627
Peak flow (m ³ s ⁻¹)		130.30	97.11	90.38	43.57	23.38	18.93	27.86	96.58	74.33	165.30	129.20	104.90	165.30
Runoff (mm)		256	176	157	126	69	63	88	110	179	229	253	234	1938
Rainfall (mm)		254	145	164	118	94	114	138	152	217	223	255	219	2093

Factors affecting flow regime 1981 runoff is 120% of previous mean
Station type CB rainfall 131%

074002 Irt at Galesyke

1981

Measuring authority NWWA Grid reference NY 136038 Catchment area (sq km) 44.2
First year 1967 Level stn (m OD) 54.17 Max alt (m OD) 978

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	6.997	2.783	5.877	1.014	1.795	3.959	3.358	2.603	3.796	5.779	6.688	2.272	3.910
	Peak	26.71	7.48	13.96	3.06	3.87	10.18	10.07	11.08	13.44	15.05	14.56	8.27	26.71
Runoff (mm)		424	152	356	59	109	232	203	158	223	350	392	138	2797
Rainfall (mm)		259	176	366	73	176	249	206	166	365	362	394	121	2913

Monthly and yearly statistics for previous record (Dec 1967 to Dec 1980)

Mean	Avg	4.154	3.084	2.611	2.975	1.432	1.568	2.227	2.462	3.631	4.297	4.958	4.061	3.120
Flows	Low	1.690	0.943	0.737	0.430	0.257	0.457	0.797	0.569	0.400	0.554	2.870	1.802	2.440
	High	8.242	5.117	6.575	5.947	2.200	5.216	4.141	5.144	5.582	8.174	6.356	7.645	3.950
Peak flow (m ³ s ⁻¹)		22.87	18.67	16.74	34.04	6.19	10.27	27.26	18.46	17.89	27.29	21.85	20.33	34.04
Runoff (mm)		252	171	158	174	87	92	135	149	213	260	291	246	2228
Rainfall (mm)		331	196	220	166	125	169	195	208	288	298	347	300	2843

Factors affecting flow regime 1 1981 runoff is 126% of previous mean
Station type VA rainfall 102%

074005 Ehen at Braystones**1981**Measuring authority: NWWA
First year: 1973Grid reference: NY 009061
Level stn. (m OD) 10 11Catchment area (sq km): 125.5
Max alt. (m OD): 899**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	6.272	3.576	7.372	1.437	0.970	4.371	7.835	1.679	4.828	8.910	9.506	3.136	4.574
(m ³ s ⁻¹)	Peak	23.46	24.06	38.01	3.31	6.29	30.96	20.89	11.20	29.09	50.58	57.83	8.81	57.83
Runoff (mm)		134	69	157	30	21	90	61	36	100	190	196	67	1150
Rainfall (mm)		159	96	240	47	103	145	151	91	242	276	275	69	1894

Monthly and yearly statistics for previous record (Jan 1974 to Dec 1980)

Mean	Avg	8.108	7.077	4.995	3.187	1.816	1.413	1.543	3.782	6.000	7.355	8.468	7.445	5.083
flows	Low	4.881	2.011	2.225	0.993	0.771	0.779	1.160	0.661	1.694	3.640	5.005	3.845	3.963
(m ³ s ⁻¹)	High	16.030	15.890	10.220	5.945	3.764	7.871	1.973	7.699	8.921	14.080	11.770	13.380	6.328
Peak flow (m ³ s ⁻¹)		97.85	79.36	59.02	81.07	12.56	14.30	18.17	65.62	72.82	115.90	63.82	91.47	116.90
Runoff (mm)		173	137	107	66	39	29	33	81	124	157	175	159	1278
Rainfall (mm)		223	125	154	81	71	85	121	136	216	200	208	191	1811

Factors affecting flow regime: E
Station type: VA1981 runoff is 90% of previous mean
rainfall 105%**075002 Derwent at Camerton****1981**Measuring authority: NWWA
First year: 1960Grid reference: NY 038305
Level stn. (m OD) 16.70Catchment area (sq km): 663.0
Max alt. (m OD): 950**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	48.140	23.170	44.260	9.507	12.800	23.360	13.410	7.718	31.150	61.620	54.720	19.760	29.130
(m ³ s ⁻¹)	Peak	128.50	91.83	125.50	32.98	21.31	70.54	55.93		141.40	200.50	211.30	68.43	
Runoff (mm)		194	84	179	37	52	91	54	31	122	249	214	80	1388
Rainfall (mm)		152	89	206	43	112	120	127	73	251	263	246	65	1747

Monthly and yearly statistics for previous record (Sep 1960 to Dec 1980)

Mean	Avg	35.540	27.770	22.420	20.670	13.980	10.230	11.300	18.390	25.030	32.460	40.010	39.380	24.748
flows	Low	9.587	4.837	7.466	4.359	2.753	2.041	3.582	2.574	2.885	2.755	18.180	14.740	14.824
(m ³ s ⁻¹)	High	84.550	56.570	51.550	38.940	36.280	34.800	20.400	43.470	39.790	107.800	63.200	71.590	34.235
Peak flow (m ³ s ⁻¹)		219.20	165.70	107.10	145.50	99.56	135.80	80.19	216.20	140.10	264.70	195.90	194.00	284.70
Runoff (mm)		144	102	91	81	56	40	46	74	98	131	156	159	1178
Rainfall (mm)		179	105	130	102	104	111	116	145	186	187	194	176	1735

Factors affecting flow regime: S P
Station type: VA1981 runoff is 118% of previous mean
rainfall 101%**075004 Cocker at Southwaite Bridge****1981**Measuring authority: NWWA
First year: 1967Grid reference: NY 131281
Level stn. (m OD) 59.50Catchment area (sq km): 116.6
Max alt. (m OD): 838**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	7.544	3.974	7.874	1.567	2.375	5.005	7.797	1.692	7.175	11.390	10.360	3.031	5.399
(m ³ s ⁻¹)	Peak	29.71		24.38	4.51	4.96	20.35	14.35	5.45	36.33	46.40	39.12	10.18	
Runoff (mm)		173	82	181	35	55	111	64	39	160	262	230	70	1462
Rainfall (mm)														

Monthly and yearly statistics for previous record (Dec 1967 to Dec 1980)

Mean	Avg	7.539	5.380	4.380	4.100	2.041	2.006	2.252	3.176	5.202	6.337	8.787	7.445	4.881
flows	Low	3.996	2.009	1.270	0.677	0.528	0.633	0.807	0.738	0.718	0.668	4.528	3.995	3.134
(m ³ s ⁻¹)	High	17.190	9.483	10.010	9.001	3.621	9.122	4.085	6.282	9.779	13.960	12.220	12.750	5.821
Peak flow (m ³ s ⁻¹)		50.86	48.58	32.97	45.62	10.09	43.37	24.13	27.11	34.79	93.20	61.61	52.49	93.20
Runoff (mm)		173	113	101	91	47	45	52	73	116	146	195	171	1321
Rainfall (mm)		221	110	139	116	105	109	130	142	205	206	223	185	1891

Factors affecting flow regime: P
Station type: VA

1981 runoff is 111% of previous mean

076015 Eamont at Pooley Bridge**1981**Measuring authority: NWWA
First year: 1970Grid reference: NY 472249
Level stn. (m OD) 144.17Catchment area (sq km): 145.0
Max alt. (m OD): 950**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	12.460	6.544	15.320	3.926	6.065	8.166	3.328	1.854	10.660	19.890	14.540	6.047	9.067
(m ³ s ⁻¹)	Peak	28.33	17.06	29.87	11.40	10.04	16.90	6.32	3.34	40.71	56.55	29.30	19.12	56.55
Runoff (mm)		230	109	283	70	112	146	61	34	191	367	260	112	1976
Rainfall (mm)		182	141	303	68	166	154	119	56	375	353	315	100	2332

Monthly and yearly statistics for previous record (Jul 1970 to Dec 1980)

Mean	Avg	11.830	10.140	7.820	5.899	3.421	3.046	2.735	4.047	5.938	7.241	13.330	12.800	7.319
flows	Low	5.967	2.813	3.185	1.842	0.757	0.597	1.232	0.726	0.949	0.841	3.953	5.423	3.959
(m ³ s ⁻¹)	High	24.100	21.430	16.860	10.160	7.292	11.340	5.430	6.611	12.010	13.430	21.230	23.550	9.209
Peak flow (m ³ s ⁻¹)		63.40	50.55	38.74	20.31	23.55	19.15	11.91	17.85	28.86	60.68	62.96	69.58	69.58
Runoff (mm)		219	171	144	102	83	54	51	75	106	134	238	236	1593
Rainfall (mm)		290	162	168	109	101	107	121	153	188	195	288	259	2141

Factors affecting flow regime: P
Station type: CC1981 runoff is 124% of previous mean
rainfall 109%

078003 Annan at Brydekirk**1981**Measuring authority SRPB
First year 1967Grid reference NY 191704
Level stn (m OD) 10 00Catchment area (sq km) 925 0
Max alt (m OD) 821**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	40 400	26 980	52 150	12 530	11 820	32 020	10 450	4 654	42 040	50 110	46 210	19 530	28 075
(m ³ s ⁻¹)	Peak	110 60	178 60	200 10	36 24	42 70	171 30	65 44	8 56	315 20	251 40	247 20	67 03	315 20
Runoff (mm)		117	71	151	35	34	90	30	13	118	145	129	57	990
Rainfall (mm)		112	79	188	41	99	135	96	35	238	183	170	56	1432

Monthly and yearly statistics for previous record (Oct 1967 to Dec 1980)

Mean	Avg	42 700	34 160	26 710	20 030	14 700	10 260	8 651	13 760	23 360	33 550	40 960	40 270	25 719
Flows	Low	23 490	12 930	8 402	6 124	3 519	2 937	3 253	3 284	3 362	3 592	13 950	21 110	16 402
(m ³ s ⁻¹)	High	83 440	51 490	53 770	40 600	28 890	32 150	16 180	47 880	47 490	86 820	70 350	68 170	32 319
Peak flow (m ³ s ⁻¹)		268 00	291 30	222 10	182 50	168 50	157 00	151 20	254 50	201 90	499 10	310 40	315 00	499 10
Runoff (mm)		124	90	77	56	43	29	25	40	65	97	115	117	878
Rainfall (mm)		137	93	102	69	86	81	89	97	130	131	134	126	1276

Factors affecting flow regime
Station type VA1981 runoff is 113% of previous mean
rainfall 112%**078004 Kinnel Water at Redhall****1981**Measuring authority SRPB
First year 1963Grid reference NY 077868
Level stn (m OD) 53 70Catchment area (sq km) 76 1
Max alt (m OD) 697**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	3 986	2 319	4 706	0 805	1 271	2 698	0 854	0 202	4 336	4 737	4 752	1 081	2 646
(m ³ s ⁻¹)	Peak	24 76	38 23	53 18	4 66	13 05	36 09	14 53	0 97	56 18	51 33	47 94	6 83	56 18
Runoff (mm)		140	74	166	27	45	92	30	7	148	167	162	38	1095
Rainfall (mm)		130	94	207	50	108	144	109	37	289	214	177	63	1622

Monthly and yearly statistics for previous record (Oct 1963 to Dec 1980—incomplete or missing months total 1.0 years)

Mean	Avg	3 882	2 873	2 340	1 677	1 578	1 067	0 875	1 374	2 687	3 158	3 866	3 808	2 430
Flows	Low	1 610	0 590	0 552	0 251	0 122	0 111	0 128	0 110	0 099	0 207	1 469	1 430	1 507
(m ³ s ⁻¹)	High	8 456	5 061	5 124	4 161	3 715	3 282	1 763	4 363	4 985	7 288	6 819	7 009	3 083
Peak flow (m ³ s ⁻¹)		61 17	77 68	46 98	42 46	51 79	26 80	57 71	52 36	67 21	110 90	86 69	76 73	110 90
Runoff (mm)		137	92	82	57	56	36	31	48	97	111	132	134	1008
Rainfall (mm)		138	97	110	79	101	89	89	107	145	140	147	143	1385

Factors affecting flow regime
Station type VA1981 runoff is 109% of previous mean
rainfall 117%**080001 Urr at Dalbeattie****1981**Measuring authority SRPB
First year 1963Grid reference NX 822610
Level stn (m OD) 4 01Catchment area (sq km) 199 0
Max alt (m OD) 432**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	9 586	5 258	11 780	2 793	2 915	6 852	1 884	0 495	7 301	11 970	9 018	3 984	6 153
(m ³ s ⁻¹)	Peak	32 47	80 02	73 72	17 15	10 56	44 86	21 71	0 87	79 94	87 34	64 01	31 76	87 34
Runoff (mm)		129	64	159	36	39	89	25	7	95	161	117	54	976
Rainfall (mm)		125	82	189	49	104	121	98	24	241	188	166	55	1442

Monthly and yearly statistics for previous record (Nov 1963 to Dec 1980)

Mean	Avg	9 048	7 762	5 455	3 543	3 018	1 980	1 199	2 301	4 999	7 138	9 293	9 310	5 408
Flows	Low	3 534	1 419	2 094	0 753	0 308	0 246	0 164	0 164	0 319	0 522	3 229	3 369	3 109
(m ³ s ⁻¹)	High	19 080	13 750	10 720	7 485	8 229	6 132	2 973	10 080	11 540	19 400	18 110	15 720	7 485
Peak flow (m ³ s ⁻¹)		113 40	91 45	68 48	61 69	53 50	34 97	66 15	61 69	84 28	109 00	95 58	106 30	113 40
Runoff (mm)		127	95	73	46	41	26	16	31	65	98	121	125	858
Rainfall (mm)		125	91	98	67	81	79	76	95	128	128	140	128	1236

Factors affecting flow regime
Station type VA1981 runoff is 114% of previous mean
rainfall 117%**081003 Luce at Airyhemming****1981**Measuring authority SRPB
First year 1966Grid reference NX 180599
Level stn (m OD) 19 00Catchment area (sq km) 171 0
Max alt (m OD) 438**Hydrometric statistics for 1981**

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	12 090	4 382	11 300	1 912	3 975	4 398	2 950	1 889	11 000	14 960	11 200	7 144	7 267
(m ³ s ⁻¹)	Peak	92 99	75 25	96 05	21 56	42 37	64 10	55 02	40 05	192 40	192 90	83 41	172 00	182 90
Runoff (mm)		189	62	177	29	62	67	46	30	167	234	170	117	1345
Rainfall (mm)		189	78	193	48	116	103	102	63	232	244	185	99	1652

Monthly and yearly statistics for previous record (Jan 1967 to Dec 1980)

Mean	Avg	10 430	7 397	5 293	3 512	2 508	1 815	1 936	2 580	5 712	8 251	9 850	8 267	5 604
Flows	Low	5 438	3 943	1 359	0 454	0 260	0 225	0 333	0 287	0 365	1 689	6 945	2 445	3 691
(m ³ s ⁻¹)	High	15 600	12 110	10 190	8 289	7 232	4 587	5 399	6 806	12 820	16 750	13 770	13 120	7 826
Peak flow (m ³ s ⁻¹)		163 90	146 10	197 30	197 60	56 81	63 39	131 50	171 80	119 40	154 90	168 40	148 00	197 60
Runoff (mm)		163	106	83	53	39	24	30	40	87	129	149	129	1034
Rainfall (mm)		170	103	103	74	77	78	91	98	140	151	161	137	1378

Factors affecting flow regime S P
Station type VA1981 runoff is 130% of previous mean
rainfall 120%

082001 Girvan at Robstone**1981**

Measuring authority: CRPB

Grid reference: NX 217997

Catchment area (sq km): 245.5

First year: 1963

Level stn. (m OD) 9.13

Max alt. (m OD): 659

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg.	13 650	6 492	8 015	1 931	2 396	3 054	2 495	2 214	10 890	15 580	13 000	4 333	7 004
(m ³ s ⁻¹)	Peak	94 01	53 83	50 77	5 12	10 32	25 26	26 82	24 99	82 62	147 20	51 07	20 32	147 20
Runoff (mm)		149	64	87	20	26	32	27	24	115	170	137	47	900
Rainfall (mm)		178	92	152	30	89	91	107	67	253	207	196	53	1515

Monthly and yearly statistics for previous record (Oct 1963 to Dec 1980)

Mean	Avg.	10 000	7 402	5 827	3 983	2 887	2 033	2 092	3 079	5 573	8 628	11 340	9 873	6 053
Flows	Low	4 789	2 805	1 594	0 974	0 786	0 482	0 521	0 557	0 546	1 191	6 444	2 894	4 222
(m ³ s ⁻¹)	High	19 370	12 990	11 520	11 340	8 256	5 682	6 317	7 487	11 880	17 380	20 230	19 450	7 803
Peak flow (m ³ s ⁻¹)		95 68	84 94	57 16	67 64	55 75	52 91	97 92	92 54	82 13	101 60	88 07	91 69	101 60
Runoff (mm)		109	74	64	47	31	21	23	34	59	94	120	108	778
Rainfall (mm)		130	85	94	73	86	83	93	95	131	150	163	133	1316

Factors affecting flow regime:

Station type: VA

1981 runoff is 116% of previous mean
rainfall 115%**083003 Ayr at Catrine****1981**

Measuring authority: CRPB

Grid reference: NS 525259

Catchment area (sq km): 166.3

First year: 1970

Level stn. (m OD) 89.94

Max alt. (m OD): 548

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg.	13 880	5 228	7 265	1 334	1 818	4 167	2 796	1 739	8 038	10 530	11 480	3 313	5 924
(m ³ s ⁻¹)	Peak	178 50	93 52	47 73	5 37	16 73	60 69	38 54	45 58	112 20	162 60	87 68	26 49	178 50
Runoff (mm)		224	76	117	21	29	65	37	28	125	170	179	53	1124
Rainfall (mm)		196	74	149	23	75	106	85	48	201	206	201	40	1404

Monthly and yearly statistics for previous record (Sep 1970 to Dec 1980)

Mean	Avg.	7 880	4 973	4 682	2 826	1 743	1 592	1 480	2 358	4 678	5 641	7 724	6 850	4 386
Flows	Low	3 423	2 287	1 050	0 525	0 507	0 556	0 362	0 353	0 425	0 443	3 040	2 941	3 223
(m ³ s ⁻¹)	High	13 800	6 568	10 780	6 676	4 537	3 887	3 280	6 597	11 800	10 990	12 900	13 180	5 813
Peak flow (m ³ s ⁻¹)		136 50	65 37	92 30	77 90	80 49	57 18	44 20	74 36	155 50	177 00	126 10	108 90	177 00
Runoff (mm)		127	73	75	44	28	25	24	38	73	91	120	110	829
Rainfall (mm)		136	92	79	74	72	84	92	76	106	128	153	125	1217

Factors affecting flow regime:

Station type: VA

1981 runoff is 136% of previous mean
rainfall 115%**084001 Kelvin at Killermont****1981**

Measuring authority: CRPB

Grid reference: NS 558705

Catchment area (sq km): 335.1

First year: 1948

Level stn. (m OD) 27.10

Max alt. (m OD): 578

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg.	12 970	9 528	12 160	2 571	3 780	7 474	7 152	5 137	16 910	14 200	19 050	6 442	9 781
(m ³ s ⁻¹)	Peak	47 24	65 88	71 44	4 60	14 48	35 02	24 54	8 87	75 46	71 14	60 95	22 47	76 46
Runoff (mm)		104	69	97	20	30	58	57	41	131	114	147	51	819
Rainfall (mm)		111	87	144	17	93	90	101	36	248	178	194	49	1348

Monthly and yearly statistics for previous record (Oct 1948 to Dec 1980—incomplete or missing months total 1.1 years)

Mean	Avg.	11 730	9 168	7 875	5 697	4 593	3 696	4 328	5 816	7 984	10 470	12 020	12 920	8 023
Flows	Low	4 772	2 111	3 018	1 602	1 875	1 463	2 097	1 357	1 585	1 959	3 840	5 825	5 538
(m ³ s ⁻¹)	High	22 310	17 330	15 120	9 899	9 833	10 850	7 571	11 000	16 240	32 970	21 520	21 280	13 078
Peak flow (m ³ s ⁻¹)		132 20	99 11	106 10	58 05	80 99	81 79	73 06	133 10	97 41	175 20	101 60	114 10	176 20
Runoff (mm)		94	67	63	44	37	29	35	46	62	84	93	103	766
Rainfall (mm)		114	80	76	69	80	77	96	107	118	119	119	131	1186

Factors affecting flow regime: E

Station type: VA

1981 runoff is 122% of previous mean
rainfall 114%**084009 Nethan at Kirkmuirhill****1981**

Measuring authority: CRPB

Grid reference: NS 809429

Catchment area (sq km): 66.0

First year: 1966

Level stn. (m OD) 121.78

Max alt. (m OD): 522

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg.	4 142	1 546	2 838	0 463	0 457	1 397	0 506	0 219	2 547	3 764	3 707	0 979	1 880
(m ³ s ⁻¹)	Peak	34 35	31 39	35 56	0 91	3 51	23 21	6 82	1 88	45 98	38 52	25 54	5 22	45 98
Runoff (mm)		168	57	115	18	19	55	21	9	100	153	146	40	899
Rainfall (mm)		149	71	146	18	71	101	84	29	211	190	179	37	1286

Monthly and yearly statistics for previous record (Nov 1966 to Dec 1980)

Mean	Avg.	2 268	1 913	1 731	1 054	0 880	0 460	0 434	0 580	1 119	1 801	2 592	2 310	1 426
Flows	Low	1 374	0 910	0 515	0 310	0 199	0 230	0 159	0 144	0 182	0 167	0 866	0 916	1 093
(m ³ s ⁻¹)	High	4 850	3 217	3 542	2 191	1 989	1 671	1 214	1 965	2 305	3 382	5 125	5 153	1 806
Peak flow (m ³ s ⁻¹)		35 45	40 68	29 74	35 79	30 36	16 96	44 64	41 28	35 05	80 06	53 70	41 52	80 06
Runoff (mm)		92	71	70	41	36	18	18	24	44	73	102	94	682
Rainfall (mm)		123	85	75	58	83	67	84	78	100	117	130	104	1104

Factors affecting flow regime:

Station type: CC

1981 runoff is 132% of previous mean
rainfall 116%

085001 Leven at Linnbrane

1981

Measuring authority CRPB
First year 1963
Grid reference NS 394803
Level stn (m OD) 4 30
Catchment area (sq km) 784.3
Max alt (m OD) 1130

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	88 100	59 480	51 150	25 160	13 010	30 100	15 960	13 040	41 490	73 930	79 020	52 840	45 273
	Peak	137 00	82 84	69 22	56 39	22 58	49 87	37 50	21 19	100 80	103 70	104 20	100 50	137 00
Runoff (mm)		301	183	175	83	44	99	55	45	137	252	261	180	1816
Rainfall (mm)		206	139	229	19	155	124	128	43	359	264	319	76	2061

Monthly and yearly statistics for previous record (Jul 1963 to Dec 1980)

Mean	Avg	57 590	52 410	42 980	32 340	26 940	21 810	19 460	21 990	34 060	50 820	57 820	60 050	39 796
Flows	Low	29 410	18 610	16 630	10 550	10 620	9 716	10 320	9 605	9 429	10 830	24 540	36 270	30 712
	High	119 100	102 100	98 470	51 390	51 100	51 860	30 690	40 070	64 980	90 150	96 320	91 240	49 875
Peak flow (m ³ s ⁻¹)		150 50	140 80	122 70	83 14	71 90	66 58	57 64	56 96	86 75	115 20	130 00	131 00	150 50
Runoff (mm)		197	163	147	107	92	72	66	75	113	174	191	205	1601
Rainfall (mm)		236	146	142	108	137	132	130	132	187	210	213	211	1984

Factors affecting flow regime
Station type VA
1981 runoff is 113% of previous mean
rainfall 104%

094001 Ewe at Poolewe

1981

Measuring authority HRPB
First year 1970
Grid reference NG 859803
Level stn (m OD) 4 61
Catchment area (sq km) 441.1
Max alt (m OD) 1014

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	72 460	46 880	24 670	10 990	10 360	14 070	13 520	13 340	36 800	55 260	72 480	37 900	34 081
	Peak	147 60	104 50	40 14	28 13	20 42	24 63	17 06	23 04	109 20	83 39	136 10	109 70	147 60
Runoff (mm)		440	257	150	65	63	83	82	81	216	336	426	269	2428
Rainfall (mm)		395	208	193	69	56	146	103	108	386	360	598	131	2753

Monthly and yearly statistics for previous record (Oct 1970 to Dec 1980)

Mean	Avg	35 680	25 770	23 060	23 590	15 370	15 600	14 420	14 770	28 270	37 340	48 400	44 800	26 819
Flows	Low	18 550	12 980	8 842	4 537	3 862	6 475	9 364	7 437	8 046	13 160	22 680	16 500	19 389
	High	77 070	45 800	49 670	38 270	27 730	27 180	26 180	24 570	52 350	59 150	77 600	81 840	30 710
Peak flow (m ³ s ⁻¹)		112 70	69 96	101 50	68 43	65 63	64 43	33 92	36 47	97 14	119 00	109 00	120 70	120 20
Runoff (mm)		277	143	140	139	93	92	88	90	166	196	284	272	1919
Rainfall (mm)		237	170	166	135	118	142	141	134	215	272	337	310	2377

Factors affecting flow regime N
Station type VA
1981 runoff is 127% of previous mean
rainfall 116%

095001 Inver at Little Assynt

1981

Measuring authority HRPB
First year 1977
Grid reference NC 147250
Level stn (m OD) 60 30
Catchment area (sq km) 137.5
Max alt (m OD) 988

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	19 950	11 330	6 295	3 968	3 530	4 527	4 661	5 812	14 730	20 280	23 960	10 560	10 800
	Peak	55 25	31 02	12 66	13 15	7 85	6 45	8 30	9 46	56 50	31 98	50 06	46 65	58 50
Runoff (mm)		389	199	123	75	69	85	91	113	278	395	452	206	2473
Rainfall (mm)		329	182	197	83	70	153	107	121	335	378	527	126	2608

Monthly and yearly statistics for previous record (Aug 1977 to Dec 1980)

Mean	Avg	8 144	5 756	8 915	5 325	3 556	4 037	6 564	5 044	10 560	13 560	15 540	10 240	8 147
Flows	Low	6 949	5 045	4 402	3 453	1 660	3 092	4 273	3 354	5 263	6 227	13 010	4 631	8 410
	High	9 900	6 410	13 750	7 552	6 247	4 805	10 340	8 002	13 390	21 180	18 170	17 580	8 861
Peak flow (m ³ s ⁻¹)		17 02	19 41	37 30	10 99	9 73	19 72	14 90	13 16	28 35	57 51	34 70	44 40	57 51
Runoff (mm)		159	102	174	100	69	76	128	98	199	272	293	200	1870
Rainfall (mm)														

Factors affecting flow regime N
Station type VA
1981 runoff is 132% of previous mean

096001 Halladale at Halladale

1981

Measuring authority HRPB
First year 1975
Grid reference NC 891561
Level stn (m OD) 23 17
Catchment area (sq km) 204.6
Max alt (m OD) 580

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	11 260	4 998	6 261	0 671	0 700	2 637	0 489	0 720	7 886	16 560	10 030	8 674	5 907
	Peak	83 60	53 84	45 83	4 20	7 11	22 15	3 07	6 66	189 10	176 00	64 21	115 40	189 10
Runoff (mm)		147	59	82	9	9	33	6	9	100	217	127	114	913
Rainfall (mm)		158	65	124	36	37	96	48	50	153	256	180	115	1318

Monthly and yearly statistics for previous record (Jan 1976 to Dec 1980)

Mean	Avg	8 608	6 796	5 393	3 548	2 466	1 812	2 276	1 968	3 812	6 054	9 914	7 525	5 003
Flows	Low	5 333	3 801	2 907	0 624	0 279	0 283	0 215	0 188	2 181	2 795	2 510	3 004	3 420
	High	11 900	10 940	9 753	6 442	5 434	3 528	4 943	3 386	6 125	13 230	14 730	12 390	6 418
Peak flow (m ³ s ⁻¹)		83 52	68 52	106 90	53 18	108 00	46 89	129 10	76 31	69 45	110 60	163 20	84 22	163 20
Runoff (mm)		113	81	71	45	32	23	30	26	48	79	126	99	772
Rainfall (mm)														

Factors affecting flow regime N
Station type VA
1981 runoff is 118% of previous mean

101002 Medina at Upper Shide

1981

Measuring authority: SWA Grid reference: SZ 503874 Catchment area (sq km): 29.8
First year: 1960 Level stn. (m OD): 10.40 Max alt. (m OD): 167

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	0.252	0.259	0.903	0.306	0.288	0.212	0.163	0.149	0.246	0.413	0.301	0.517	0.334
(m ³ s ⁻¹)	Peak	0.64	1.60	7.28	1.15			0.31	0.64	2.66	1.70	1.42		
Runoff (mm)		23	21	81	27	26	18	15	13	21	37	26	46	355
Rainfall (mm)		39	48	191	35	97	34	58	32	153	130	43	115	975

Monthly and yearly statistics for previous record (Oct 1965 to Dec 1980—incomplete or missing months total 70 years)

Mean	Avg	0.448	0.498	0.295	0.248	0.205	0.138	0.142	0.117	0.178	0.205	0.388	0.374	0.268
Flows	Low	0.150	0.160	0.133	0.104	0.094	0.069	0.083	0.044	0.080	0.110	0.120	0.116	0.261
(m ³ s ⁻¹)	High	0.673	0.760	0.445	0.522	0.356	0.199	0.199	0.180	0.365	0.411	0.769	0.611	0.261
Peak flow (m ³ s ⁻¹)		5.86	6.00	4.20	5.44	4.90	1.79	3.72	1.74	3.74	4.15	8.64	5.52	8.64
Runoff (mm)		40	41	27	22	18	12	13	10	15	18	34	34	284
Rainfall (mm)		97	104	96	46	58	62	68	70	40	79	71	126	912

Factors affecting flow regime: Station type: FL 1981 runoff is 125% of previous mean rainfall 107%

201007 Burn Dennet at Burdennet Bridge

1981

Measuring authority: DOEN Grid reference: IC 372047 Catchment area (sq km): 145.3
First year: 1975 Level stn. (m OD): 2.00 Max alt. (m OD): 539

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	8.234	4.805	4.693	1.722	3.905	2.707	3.104	1.188	6.470	8.642	5.150	4.555	4.598
(m ³ s ⁻¹)	Peak	60.41	56.69	33.66	3.08	34.15	19.95	66.01	6.78	107.30	89.84	52.03	35.05	107.30
Runoff (mm)		152	80	87	31	72	48	57	22	115	159	92	84	999
Rainfall (mm)		130	77	102	39	121	86	110	48	167	183	100	75	1238

Monthly and yearly statistics for previous record (Jan 1976 to Dec 1980—incomplete or missing months total 0.1 years)

Mean	Avg	6.496	4.976	3.937	2.529	2.116	1.565	1.858	1.853	3.096	4.104	6.078	6.319	3.739
Flows	Low	4.633	2.652	2.491	1.638	0.914	0.898	1.068	0.614	0.692	2.852	3.368	4.024	2.833
(m ³ s ⁻¹)	High	7.839	7.714	5.308	3.615	3.189	2.720	4.098	4.031	5.486	6.698	8.494	8.534	4.412
Peak flow (m ³ s ⁻¹)		120	84	73	45	39	28	34	34	55	76	108	116	812
Rainfall (mm)		119	73	95	56	74	74	82	65	104	112	125	111	1090

Factors affecting flow regime: E Station type: VA 1981 runoff is 123% of previous mean rainfall 114%

203010 Blackwater at Maydown Bridge

1981

Measuring authority: DOEN Grid reference: IH 820519 Catchment area (sq km): 951.4
First year: 1970 Level stn. (m OD): 15.00 Max alt. (m OD): 362

Hydrometric statistics for 1981

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
Flows	Avg	30.390	18.390	42.850	7.123	18.610	17.480	3.616	1.719	15.910	29.570	23.020	25.980	19.555
(m ³ s ⁻¹)	Peak	60.75	64.07	73.48	103.50	45.59	50.69	22.71	3.65	51.44	73.54	52.79	58.39	103.50
Runoff (mm)		86	47	121	19	52	48	10	5	43	83	63	73	650
Rainfall (mm)		88	62	142	46	117	71	69	26	153	113	81	78	1046

Monthly and yearly statistics for previous record (Oct 1970 to Dec 1980)

Mean	Avg	32.310	26.450	18.000	11.530	7.211	4.831	3.403	6.314	9.703	15.350	27.820	28.640	15.871
Flows	Low	17.470	13.030	8.362	3.399	1.435	1.031	1.048	0.686	1.945	2.003	10.100	10.270	8.954
(m ³ s ⁻¹)	High	47.630	52.550	32.420	29.050	17.420	13.340	7.328	12.880	28.700	31.960	52.220	50.660	19.217
Peak flow (m ³ s ⁻¹)		91	68	51	31	20	13	10	18	25	43	76	81	528
Runoff (mm)		107	84	75	52	60	56	70	75	87	85	108	89	948

Factors affecting flow regime: N Station type: VA 1981 runoff is 123% of previous mean rainfall 110%

THE SURFACE WATER DATA RETRIEVAL SERVICE

The surface water archive comprises some 20,000 station years of daily river flows and incorporates data from over 1000 gauging stations throughout the United Kingdom. In addition to gauged flow data, naturalised data have been derived from the records of a small number of gauging stations. Catchment areal rainfall and the highest instantaneous flow, when available, are also archived on a monthly basis.

In order that the contents of the archive may be readily accessible, a suite of programs has been developed to provide a selection of retrieval options. Descriptions of these options are listed below, and examples of the computer output are given on pages 121 to 127. The data retrieval programs have been designed to allow flexibility in the presentation of a number of the options, particularly those producing graphical output. Before finalising a data request it is recommended that the concise register of gauging stations on pages 128 to 133, and the summary of archived data given on pages 134 to 141, be consulted to check the availability of suitable data sets.

In response to user requirements the data retrieval facilities are being continually extended. A wide range of specialist analyses and presentations is now available. Individuals having data requirements not catered for in the standard retrieval suite are invited to discuss their particular needs – address below.

Retrievals are normally available on line printer listings or magnetic tape, or as hydrograph plots.

Cost of Service

To cover the computing and handling costs, a

moderate charge will be made depending on the output options selected. Estimates of these charges may be obtained on request; the right to amend or waive charges is reserved.

Requests for retrieval options

Requests for retrieval options should include: the name and address to which the output should be directed, the gauging stations for which data are required together with the period of record of interest and the title of the required options. Where possible, a daytime telephone number should be given.

Requests should be addressed to:

Surface Water Archive
Institute of Hydrology
Maclean Building
Crowmarsh Gifford
WALLINGFORD
OXFORDSHIRE OX10 8BB

Telephone: Wallingford (0491) 38800

Hydrological Data at the Institute of Hydrology

The surface water archive is one of several major sources of hydrological data held at Wallingford. Others include an archive of flood peaks from over 600 catchments and a flood event archive comprising rainfall and river flows at short time intervals for over 3000 individual events. Data may be retrieved from these sources in a variety of formats. Enquiries concerning the availability and use of such data should be directed to the above address.

LIST OF SURFACE WATER RETRIEVAL OPTIONS

OPTION NUMBER	TITLE	NOTES
1	Table of daily mean gauged discharges	Includes monthly and annual summary statistics. Flows in cubic metres per second.
	Table of daily mean naturalised discharges	Includes monthly and annual summary statistics. Flows in cubic metres per second.
	Yearbook data tabulation (daily)	River flow and catchment rainfall data for a specified year together with basic gauging station details and flow statistics derived from the historical record.
	Table of monthly mean gauged discharges	Includes monthly and annual summary statistics. Flows in cubic metres per second.
	Table of monthly mean naturalised discharges	Includes summary statistics. Flows in cubic metres per second.

Yearbook data tabulation (monthly)	Monthly river flow and catchment rainfall data for a specified year together with comparative statistics derived from the historical record.
Table of monthly extreme flows	The lowest and highest daily mean flows, together with the highest instantaneous flow (when available). Flows in cubic metres per second. Includes summary statistics.
Table of catchment monthly rainfall	Rainfall totals in millimetres and as a percentage of the 1941–70 catchment average. Includes summary statistics.
Table of catchment monthly areal rainfall and runoff	Runoff is normally derived from the monthly mean gauged flow. An additional listing is provided for catchments with naturalised flow records. A monthly summary is provided and all rainfall and runoff totals are in millimetres.
Hydrographs of daily mean flows	Choices of scale, units, truncation level and overlay grid pattern are available. The period of record maximum and minimum flows, or the mean flow, may be included. The plots may be based on single or n-day means or on n-day running mean flows.
Hydrographs of monthly mean flows	Choices of scale, unit and overlay grid pattern are available. The period of record maximum, minimum and mean flows may be included.
Flow duration statistics	Tabulation of the 1–99 percentile flows with optional plot of the flow duration curve. The percentiles may be derived from daily flows or 'n' day averages and the analysis may be restricted to nominated periods within the year eg April–September only. Choices of scales, grid marking and units are available and the percentiles may be expressed as a percentage of the average flow or of a nominated flow.
Table of gauging station reference information	Tabulation of selected gauging station details and catchment characteristics for nominated gauging stations.
Table of hydrometric statistics	Provides a comparison between summary statistics for a selected year, or a group of years, and the corresponding statistics for a nominated period of record.
Gauging station description	A brief summary of the gauging station, its history and major influences on the flow regime.

Examples of these fifteen options follow on pages 121 to 127.

OPTION 1 TABLE OF DAILY MEAN GAUGED DISCHARGES

050001	TAW AT UMBALLITH				DAILY MEAN GAUGED DISCHARGES IN CUBIC METRES PER SECOND											
DAY					1961											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC				
1	19.190	10.970	32.280	13.900	6.922	16.710	3.006	3.249	1.272	39.130	44.220	34.430				
2	19.140	11.980	40.710	12.070	13.230	29.010	1.125	2.252	1.305	63.770	35.000	27.270				
3	21.450	43.450	26.700	10.350	16.080	16.470	3.740	1.919	1.235	105.200	29.070	23.160				
4	17.550	26.340	23.290	9.673	16.300	15.690	3.109	1.657	1.157	76.200	21.630	20.440				
5	15.950	22.470	21.070	8.913	17.550	13.640	3.043	2.093	1.109	56.640	20.230	17.690				
6	15.570	15.190	21.440	6.790	19.040	12.160	3.231	6.561	1.076	44.100	17.230	16.660				
7	13.630	17.750	33.440	2.579	17.730	11.390	2.667	4.132	1.079	33.600	15.170	31.070				
8	12.670	16.930	37.610	7.316	15.710	10.670	2.551	3.197	1.106	30.360	13.260	69.490				
9	16.150	20.630	27.500	7.043	15.770	9.451	2.263	2.767	1.096	33.360	11.630	41.100				
10	14.700	16.470	173.500	6.694	29.540	10.960	2.174	2.405	1.226	31.690	10.560	40.460				
11	11.690	15.290	136.900	7.154	17.620	17.560	2.037	7.700	1.630	30.730	10.360	69.490				
12	15.250	15.010	107.300	5.962	14.770	10.960	2.064	7.037	2.236	29.440	9.672	41.650				
13	15.650	13.250	55.670	5.427	12.960	9.766	2.115	1.920	2.266	23.360	5.364	104.300				
14	80.200	11.540	64.940	5.040	17.070	9.056	2.013	1.646	2.416	21.270	7.645	136.100				
15	59.900	11.250	47.040	4.676	16.640	6.366	1.993	1.610	4.032	34.210	7.235	72.980				
16	59.230	10.400	36.700	4.563	16.690	7.674	1.957	1.666	2.517	23.060	7.329	46.700				
17	59.010	9.654	26.140	4.267	13.340	7.013	1.939	1.564	4.231	26.540	6.770	35.680				
18	61.550	8.956	23.000	4.017	26.670	6.396	1.814	1.518	21.100	25.060	31.940	26.940				
19	51.260	6.265	19.490	3.645	21.690	5.996	1.516	1.557	42.060	32.660	45.490	22.260				
20	51.260	7.799	16.960	3.671	24.960	5.551	1.882	2.931	34.500	76.020	55.620	63.240				
21	57.170	11.540	54.130	3.520	18.270	4.932	2.531	2.170	43.510	57.400	41.660	40.630				
22	44.360	14.310	57.040	3.354	16.660	4.532	8.875	1.847	17.760	42.990	32.140	29.310				
23	36.600	11.910	44.340	3.370	16.970	4.320	5.221	1.127	14.530	32.750	27.640	23.180				
24	32.140	16.960	39.990	3.736	23.800	4.160	3.528	1.605	25.270	75.250	22.910	16.690				
25	25.910	14.590	36.440	4.100	31.200	3.912	2.766	1.512	16.670	106.000	19.190	16.110				
26	21.520	13.620	49.640	10.110	25.570	3.759	2.607	1.422	15.610	63.660	19.650	16.300				
27	16.590	24.220	32.660	24.990	24.670	3.561	2.319	1.355	15.740	45.610	55.640	42.330				
28	15.460	22.770	26.930	13.750	40.650	3.146	4.551	1.310	12.460	40.000	36.720	65.270				
29	14.910		26.930	16.340	3.165		2.000	1.179	12.950	56.140	30.406	74.130				
30	13.190		16.360	10.390	16.430	3.055	1.892	1.246	16.350	60.950	44.110	66.900				
31	11.650		15.690		15.370		2.710	1.224		32.660		53.640				
MISSING DAYS																
MEAN																
MIN																
MAX																
MONTHLY TOTALS (CUMUL DAYS)																
924.84 471.59 1616.45 233.29 606.10 773.42 85.23 66.44 296.67 1479.66 726.39 1436.79																
SUMMARY: MAX 23.400 ON 9 MAR																
MIN 1.076 ON 6 SEP																
MEAN 22.519																

OPTION 2 TABLE OF DAILY MEAN NATURALISED DISCHARGES

050500	TRADES AT KINSTON				DAILY MEAN NATURALISED DISCHARGES IN CUBIC METRES PER SECOND												
1961																	
DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC					
1	73.100	67.050	83.140	276.000	164.000	99.250	52.500	72.720	31.700	112.000	65.400	67.650					
2	71.700	56.750	159.100	227.300	56.200	192.000	50.700	50.800	11.000	164.000	64.000	72.430					
3	67.600	66.700	212.100	142.000	87.340	209.500	50.700	52.000	31.700	60.700	76.900	66.600					
4	55.700	79.100	196.100	155.000	96.700	142.050	46.720	47.500	10.900	77.600	62.600	59.100					
5	65.200	61.100	139.100	132.000	93.400	106.000	46.900	40.600	29.000	72.100	66.100	56.800					
6	68.500	67.000	127.000	117.300	85.000	102.000	45.500	122.000	29.200	93.300	61.100	69.400					
7	69.300	60.200	126.000	15.200	81.600	91.100	45.900	125.000	29.600	111.000	61.600	72.400					
8	74.300	62.700	169.000	109.000	78.200	53.400	46.600	79.100	35.400	61.000	126.000						
9	74.000	63.200	206.000	96.300	77.500	65.100	45.100	67.600	29.700	75.100	60.600	127.000					
10	75.000	55.700	242.000	105.000	92.600	67.000	43.500	64.500	26.300	79.100	57.100	104.000					
11	62.300	67.600	267.000	101.000	97.100	50.300	39.800	60.600	11.300	76.900	57.600	98.900					
12	60.300	67.300	277.000	91.900	89.900	67.100	44.900	16.500	39.100	76.600	57.500	67.000					
13	75.700	61.500	273.000	96.000	74.000	78.300	42.600	40.100	37.700	65.600	57.200	90.100					
14	76.600	61.000	269.000	122.000	71.400	71.600	41.200	41.500	16.500	57.200	55.400	130.000					
15	99.400	56.700	274.000	114.000	77.700	71.300	43.200	40.600	46.500	57.600	53.100	314.000					
16	107.000	59.900	253.000	64.500	92.700	69.300	50.600	36.600	41.300	66.700	56.600	279.000					
17	113.000	55.500	216.000	95.100	91.200	67.600	41.500	37.300	36.300	69.600	73.700	226.000					
18	121.000	55.500	160.000	60.900	97.100	65.400	42.000	37.300	36.900	63.700	96.600	145.000					
19	112.000	54.500	139.000	74.200	92.700	66.300	41.600	37.600	49.800	61.300	97.600	116.000					
20	109.000	56.500	127.000	76.500	106.000	64.400	41.400	37.400	104.000	136.000	121.000	150.000					
21	109.000	51.100	117.000	75.100	122.000	64.200	40.300	36.200	67.300	129.000	146.000	156.000					
22	113.000	53.600	173.000	75.500	101.000	59.600	35.700	35.400	61.600	147.000	131.000	152.000					
23	112.000	56.100	206.000	73.100	90.400	61.000	35.400	36.100	40.100	101.000	97.900	134.000					
24	95.900	60.100	206.000	72.500	111.000	61.700	35.100	35.100	42.700	92.600	95.400	101.500					
25	86.100	59.200	206.000	79.500	127.000	61.000	36.000	34.900	51.900	94.500	72.000	102.000					
26	76.800	61.000	203.000	126.000	266.000	57.100	47.400	34.800	131.000	107.000	75.600	99.300					
27	77.500	61.000	161.000	161.000	267.000	57.300	49.300	32.500	162.000	90.900	74.800	96.600					
28	72.500	64.600	131.000	196.000	214.000	57.400	37.600	32.700	98.300	65.500	101.000	111.000					
29			135.000	176.000	211.000	55.200	39.400	32.400	73.600	90.300	89.500	216.000					
30	71.700		145.000	143.000	127.000	50.700	37.500	32.200	101.000	61.400	97.700	295.000					
31	67.500		204.000		108.000		44.500	30.300		62.100		264.000					
MISSING DAYS: U U U U U U U U U U U U U U U U U U																	
MEAN	65.000	62.316	189.455	119.473	111.293	84.173	45.496	46.245	51.247	51.445	79.636	136.116					
MIN	65.000	53.100	61.000	72.000	71.400	50.700	37.500	30.300	26.100	63.600	55.100	66.600					
MAX	121.000	61.000	209.000	226.000	267.000	299.000	55.700	125.000	162.000	179.000	246.000	314.000					
MONTHLY TOTALS (CUMULATIVE):																	
	7939.14	1745.40	5871.10	2561.20	1509.30	7523.40	1397.80	1495.50	1597.40	2422.40	2376.90	4261.60					
SUMMARY																	
	MEAN												31.000 C.S. 15 DEC				
	MIN												26.100 C.S. 15 SEP				
	MAX												92.00%				

OPTION 3 YEARBOOK DATA TABULATION (DAILY)

050001

Taw Al Umberleigh

Measuring authority: SWMA

Grid reference: S5608237

Catchment area (sq km): 826.2

First year: 1958

Level stn. (m OD): 14.14

Max alt. (m OD): 604

DAILY MEAN GAUGED DISCHARGES (cubic metres per second)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	55.540	16.580	32.590	8.793	2.961	1.481	3.408	2.565	2.481	11.570	12.903	18.040
2	44.350	14.980	47.170	8.223	2.900	1.404	3.217	2.355	2.459	16.530	12.920	15.860
3	39.740	13.270	71.030	7.983	3.454	1.824	2.920	2.179	2.266	17.900	11.200	13.900
4	43.330	12.030	45.610	7.400	3.646	1.883	2.644	2.037	2.252	24.500	13.800	12.580
5	61.630	29.340	34.130	7.032	3.957	1.468	2.492	2.248	2.242	28.310	35.990	12.900
6	47.220	20.720	68.100	8.518	4.265	1.327	2.325	2.978	2.354	24.700	36.590	12.130
7	37.700	20.410	63.780	17.120	3.157	1.263	2.215	2.347	2.488	19.650	124.300	44.020
8	70.390	18.880	49.530	10.250	2.891	1.264	2.002	2.012	2.319	16.720	96.670	38.800
9	64.400	17.320	62.320	7.853	2.742	1.193	2.567	1.907	2.242	14.040	53.580	104.300
10	38.680	16.780	75.100	7.298	2.652	1.170	2.247	1.940	2.165	14.970	43.580	132.400
11	28.550	36.260	51.800	6.697	2.494	1.511	13.540	1.406	1.979	39.210	41.030	105.300
12	22.210	32.680	58.890	6.468	2.349	2.070	77.330	1.693	1.939	29.550	117.200	97.190
13	18.400	30.180	39.020	6.125	2.285	1.870	25.960	1.917	1.802	31.830	100.900	60.400
14	16.590	23.040	33.270	5.856	2.221	1.375	25.070	2.937	1.712	28.160	85.790	81.640
15	34.080	19.950	101.000	5.622	2.218	1.229	18.550	5.925	1.718	22.720	59.250	78.900
16	111.600	17.310	92.820	5.272	2.254	1.233	12.270	3.144	1.655	38.350	51.730	70.870
17	77.900	15.720	61.230	4.995	2.139	1.165	9.724	2.562	1.614	37.310	50.120	85.400
18	61.970	14.420	43.950	4.840	2.076	2.345	6.104	3.979	1.546	30.180	58.710	61.470
19	48.630	12.680	41.430	4.612	2.040	3.246	6.780	3.467	1.595	25.920	54.270	170.000
20	38.170	11.330	32.000	4.427	2.030	1.932	5.789	2.564	1.740	36.880	45.640	97.760
21	34.560	15.330	38.170	4.270	2.072	1.546	5.126	2.168	2.211	56.460	87.420	66.540
22	32.700	19.450	27.910	4.165	2.815	2.336	4.590	2.137	2.249	39.990	60.730	47.950
23	26.630	12.880	23.870	3.903	2.596	6.278	4.230	2.229	2.293	30.220	55.170	50.290
24	26.710	11.770	21.070	3.692	2.238	4.353	4.015	2.342	12.840	24.060	63.740	54.570
25	24.830	16.350	18.340	3.546	2.031	3.678	3.669	2.694	10.620	20.490	55.550	42.160
26	39.890	13.660	16.050	3.408	1.845	9.493	3.249	2.486	7.525	17.240	45.080	35.430
27	29.160	13.970	14.190	3.286	1.756	6.750	2.986	2.883	14.970	14.320	35.870	29.480
28	27.260	19.720	12.550	3.187	1.663	5.362	2.764	2.257	12.460	12.260	30.590	24.210
29	24.700		11.280	3.126	1.609	5.605	2.646	2.073	12.590	10.990	24.300	20.670
30	21.050		10.050	3.074	1.508	4.099	2.537	2.637	10.630	9.886	20.420	17.980
31	18.170		9.077		1.477		2.585	2.652		9.246		16.360
Average	40.860	18.540	42.170	6.041	2.462	2.723	8.563	2.585	4.278	24.260	52.830	55.450
Lowest	16.590	11.330	9.077	3.074	1.477	1.165	2.030	1.693	9.246	11.200	12.130	
Highest	111.600	38.260	101.000	17.120	4.265	9.491	77.330	5.925	16.970	56.460	124.300	170.000
Peak flow	127.600	55.380	143.900	23.890	5.538	12.480	162.200	7.727	25.400	72.350	215.220	241.100
Day of peak	16	13	15	7	6	27	12	15	24	17	8	19
Monthly total (million cu m)	109.40	44.84	112.90	15.66	6.59	7.06	22.94	6.92	11.09	64.96	136.90	148.50
Runoff (mm)	132	54	137	19	8	9	28		13	79	166	180
Rainfall (mm)	106	78	143	24	37	116	67		61	129	192	179

STATISTICS OF MONTHLY DATA FOR PREVIOUS RECORD (Oct 1958 to Dec 1981)

Mean flows:	Avg.	34.490	29.840	20.620	13.730	9.404	5.488	4.782	5.648	8.228	18.950	27.980	36.080
	Low	6.657	3.244	7.918	3.889	2.073	1.434	0.796	0.423	0.861	1.643	3.653	13.210
	(year)	1963	1959	1962	1974	1976	1976	1976	1976	1959	1978	1978	1963
	High	50.890	54.780	52.140	32.800	22.140	18.630	23.390	14.440	47.670	77.360	56.500	73.670
	(year)	1965	1970	1981	1968	1969	1972	1968	1965	1974	1980	1963	1965
Runoff:	Avg.	112	88	67	43	30	17	16	18	26	61	88	117
	Low	22	10	26	12	7	5	3	1	3	3	11	43
	High	165	160	169	103	72	52	76	47	150	251	184	239
Rainfall:	Avg.	127	91	89	70	72	66	74	87	93	112	127	137
	Low	28	5	18	8	28	10	23	33	14	14	56	41
	High	218	173	183	145	144	164	152	140	247	276	239	271

SUMMARY STATISTICS

	FOR 1982	FOR RECORD PRECEDING 1982	1982 AS % OF PRE-1982	FACTORS AFFECTING FLOW REGIME
Mean flow (m3/s)	21.810	17.890	122	* Reservoir(s) in catchment.
Lowest yearly mean		11.310	1964	* Abstraction for public water supplies.
Highest yearly mean		27.590	1960	* Augmentation from effluent returns.
Lowest monthly mean	2.462	0.423	Aug 1976	
Highest monthly mean	55.450	77.360	Oct 1960	
Lowest daily mean	1.165	0.200	28 Aug 1976	
Highest daily mean	170.000	363.800	4 Dec 1960	
Peak	241.100	644.900	4 Dec 1960	
10 Xile	59.730	45.930	130	
50 Xile	12.030	9.472	127	
95 Xile	1.612	1.250	129	
Annual total (million cu m)	687.80	564.60	122	
Annual runoff (mm)	832	683	122	
Annual rainfall (mm)	1239	1145	108	
[1961-70 rainfall average (mm)]		1183		

STATION DESCRIPTION

Velocity-area station

OPTION 4 TABLE OF MONTHLY MEAN GAUGED DISCHARGES

090001 100 AT WHEEL:ON

MONTHLY MEAN GAUGED DISCHARGES IN CUBIC METERS PER SECOND

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1979	30.918	32.905	44.410	15.654	12.801	7.679	1.956	11.910	5.314	9.371	36.082	51.477
1980	28.179	43.619	27.454	14.407	2.415	9.840	4.788	5.030	11.427	40.530	26.949	33.352
1981	29.026	16.457	52.143	7.777	19.551	9.113	2.740	2.209	9.897	47.732	24.212	46.347
1982	40.863	18.536	42.171	6.040	2.462	2.732	4.563	2.565	4.276	24.254	52.033	55.450
1983	48.920	19.180	14.436	17.895	36.998	4.472	1.450	0.036	3.245	14.976	11.134	46.906
1984	62.101	36.449	7.449	5.457	7.255	1.329	0.793	0.002	3.589	20.636	49.390	37.180
MEAN	40.134	27.961	31.344	11.216	12.747	5.893	4.083	3.995	6.292	26.251	33.767	45.152
MIN	26.179	16.457	7.449	5.457	2.255	1.329	0.793	0.002	3.245	9.371	11.134	33.352
MAX	62.101	43.619	52.143	17.895	36.998	9.840	4.788	11.910	11.427	47.732	52.033	55.450

THE SUMMARY RELATES EXCLUSIVELY TO THE YEARS SHOWN

OPTION 5 TABLE OF MONTHLY MEAN NATURALISED DISCHARGES

030001 THAMES AT KINGSTON

MONTHLY MEAN NATURALISED DISCHARGES IN CUBIC METRES PER SECOND

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1979	125,200	148,700	203,200	185,700	135,900	108,000	45,900	42,090	30,040	36,450	46,070	145,000
1980	145,100	162,200	137,000	106,700	49,000	45,030	40,200	37,400	38,010	75,420	75,540	90,020
1981	68,970	60,530	199,300	123,900	118,400	84,170	40,000	44,010	51,900	95,010	78,220	142,200
1982	198,100	123,700	187,000	90,900	55,630	48,920	38,090	31,290	31,940	89,340	129,000	177,100
1983	126,500	110,900	84,070	128,400	137,400	82,060	43,070	36,980	35,280	30,780	39,100	78,590
1984	144,000	129,200	105,000	67,800	61,000	44,490	26,700	26,100	31,000	40,130	104,900	126,100
MEAN	138,078	125,072	152,828	117,253	92,998	68,778	39,313	36,017	36,582	62,572	79,005	126,702
MIN	68,970	60,530	84,070	67,800	49,000	44,490	26,700	26,100	30,640	36,450	39,100	78,590
MAX	198,100	168,700	203,200	185,700	137,400	108,000	45,900	44,010	51,900	95,010	129,000	177,100

THE SUMMARY RELATES EXCLUSIVELY TO THE YEARS ABOVE.

OPTION 6 YEARBOOK DATA TABULATION (MONTHLY)

0 9 0 0 0 1

at U n d e r l e s s n

1982

Measuring authority: SRAA

Grid reference: SSo08237

Catchment area (sq km): 826.2

First year: 1950

Level sta. (m OD): 14.14

Page 414. (p. 404): 604

HYDROMETRIC STATISTICS FOR 1982

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Flows	Avg.	40,880	18,540	42,170	23,041	2,462	2,723	8,563	2,585	4,278	24,260	52,830	55,450	21,730
	(m ³ /s): Peak	127.60	55.38	143.90	60.89	5.36	12.46	162.20	7.73	25.40	72.35	215.20	241.10	241.10
Runoff (mm)		132	54	137	19	8	9	28	6	13	79	166	180	833
Rainfall (mm)		166	78	143	24	37	116	67	87	61	122	192	179	1239

MONTHLY AND YEARLY STATISTICS FOR PREVIOUS ALCOHOL (Oct 1958 to Dec 1961)

Mean flows (m ³ /s): Peak flow Runoff Rainfall	Avg. Low High Peak flow Runoff Rainfall	36.490 0.857 50.890 580.60 112 127	29.840 3.244 54.760 278.40 88 81	20.620 7.918 32.140 149.40 67 89	13.730 3.889 22.140 91.74 43 72	9.404 2.073 22.140 184.10 17 66	5.488 1.414 16.930 206.00 16 74	4.782 0.796 21.390 206.00 10 87	5.648 0.423 14.440 183.50 26 93	6.228 0.661 14.440 312.50 18 112	18.950 1.043 47.360 422.10 26 127	22.980 3.853 56.560 249.70 88 137	36.080 13.210 73.370 664.90 117 163	17.891 21.382 73.370 664.90 883 163
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Fracture affecting flow regime S F L
Station type: VA

1981 runoff is 1221 of previous mean
rainfall 1981

OPTION 7 TABLE OF MONTHLY EXTREME FLOWS

050001TAM AT UNDERLEIGH

TABLE OF MONTHLY INSTANTANEOUS PEAK DISCHARGES AND
HIGHEST AND LOWEST DAILY MEAN GAUGED DISCHARGES
IN CUBIC METRES PER SECOND

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1978 HI	192.600	216.700	97.510	53.100	70.040	3.504	9.965	26.430	1.737	1.388	21.980	94.700
HI	116.900	184.000	87.000	46.000	37.000	1.037	5.039	11.100	1.699	1.354	12.040	71.940
LO	15.560	6.162	13.490	5.923	2.752	1.382	1.656	1.739	1.035	0.889	0.881	3.926
1979 HI	95.310	150.800	104.700	30.700	55.430	20.550	5.994	69.190	18.710	61.830	85.940	354.100
HI	66.420	121.900	92.120	26.330	31.630	14.630	4.143	37.570	10.640	35.450	67.010	208.400
LO	12.430	10.040	11.390	8.787	6.746	3.249	1.201	1.541	2.799	3.894	12.730	13.710
1980 HI	113.400	170.100	127.300	136.600	5.565	84.430	32.830	20.430	68.730	160.400	173.000	106.300
HI	85.420	123.600	87.590	94.790	4.795	52.430	19.620	11.250	41.480	119.300	114.600	62.790
LO	10.630	13.980	10.330	3.365	1.585	1.303	4.952	3.158	4.311	7.614	6.078	10.270
1981 HI	149.700	80.990	339.900	32.560	50.860	54.120	14.080	11.550	95.070	123.900	90.340	256.000
HI	80.700	43.450	223.400	24.990	33.340	29.010	8.875	8.561	42.080	105.200	55.829	136.100
LO	11.690	7.799	15.690	3.320	8.922	3.035	1.614	1.224	1.078	21.270	7.235	16.110
1982 HI	127.600	55.360	143.900	23.590	5.536	12.480	162.200	7.727	25.400	72.550	215.200	241.100
HI	111.600	18.260	101.000	17.120	4.265	9.491	77.330	5.925	14.970	56.460	124.300	170.100
LO	16.590	11.330	9.077	3.074	1.477	1.165	2.000	1.693	1.546	5.246	11.200	12.130
MAX HI	192.600	216.700	339.900	136.600	70.040	84.430	162.200	69.190	95.070	160.400	215.200	354.100
MAX HI	116.900	184.000	223.400	94.790	37.000	52.430	77.330	37.570	42.080	119.300	124.300	208.400
MAX LO	10.630	6.162	5.077	3.074	1.477	1.165	1.201	1.224	1.035	1.589	2.861	3.926

THE SUMMARY RELATES EXCLUSIVELY TO THE YEARS SHOWN.

HI = HIGHEST INSTANTANEOUS DISCHARGE
HI = HIGHEST DAILY MEAN GAUGED DISCHARGE
LO = LOWEST DAILY MEAN GAUGED DISCHARGE

OPTION 8 TABLE OF CATCHMENT MONTHLY RAINFALL

050001TAM AT UNDERLEIGH

MONTHLY RAINFALL AND
RUNOFF (DERIVED FROM GAUGED FLOWS)
EXPRESSED IN MM OVER THE CATCHMENT

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1978 RAINFALL	160	146	114	51	49	61	95	42	39	14	68	174
RUNOFF	133	143	105	40	33	7	10	13	4	3	11	92
1979 RAINFALL	110	72	184	88	102	52	45	126	49	100	122	192
RUNOFF	100	96	144	49	42	25	6	39	17	30	113	167
1980 RAINFALL	99	130	131	24	43	164	65	69	101	175	107	115
RUNOFF	91	133	89	45	8	31	28	18	36	131	91	108
1981 RAINFALL	90	76	183	47	126	42	78	35	153	200	85	173
RUNOFF	97	49	169	24	63	29	9	7	31	155	76	150
1982 RAINFALL	106	78	143	24	37	116	67	87	81	129	192	179
RUNOFF	132	54	137	19	8	9	26	8	13	79	166	180
RAINFALL	113	100	147	43	71	87	70	72	85	124	115	167
MEAN	90	72	114	24	37	42	45	35	39	14	68	115
MIN	160	146	183	68	126	164	95	126	153	200	192	192
RUNOFF	111	95	129	35	31	20	16	17	20	80	91	140
MEAN	91	49	89	19	8	7	6	7	4	3	11	97
MIN	133	143	169	49	63	31	28	39	36	155	166	180
MAX	98	95	88	81	44	23	23	24	24	65	79	84
MEAN	83	64	68	51	19	8	11	9	10	21	16	56
MIN	>100	>100	96	>100	67	69	43	31	36	78	93	>100

THE SUMMARY RELATES EXCLUSIVELY TO THE YEARS SHOWN.

OPTION 9 TABLE OF CATCHMENT MONTHLY AREAL RAINFALL AND RUNOFF

050001TAM AT UNDERLEIGH

AREAL AVERAGE RAINFALL EXPRESSED IN MM
& AS A PERCENTAGE OF LONG TERM MEAN

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1978 RAINFALL (MM)	160	146	114	51	49	61	95	42	39	14	68	174
1 1941-70 MEAN	126	159	144	71	60	100	116	41	36	12	51	128
1979 RAINFALL (MM)	110	72	184	88	102	52	45	126	49	100	122	192
1 1941-70 MEAN	87	78	208	94	126	85	55	124	47	80	91	141
1980 RAINFALL (MM)	99	130	131	24	43	164	65	69	101	175	107	115
1 1941-70 MEAN	78	141	166	33	53	269	79	68	97	155	80	85
1981 RAINFALL (MM)	90	76	183	47	126	42	78	35	153	200	85	173
1 1941-70 MEAN	71	83	232	65	156	69	95	34	147	177	63	127
1982 RAINFALL (MM)	106	78	143	24	37	116	67	87	81	129	192	179
1 1941-70 MEAN	83	85	181	33	46	190	82	85	78	114	143	132
RAINFALL (MM)	113	100	147	43	71	87	70	72	85	124	115	167
MEAN	90	72	114	24	37	42	45	35	39	14	68	115
MIN	160	146	183	68	126	164	95	126	153	200	192	192

THE SUMMARY RELATES EXCLUSIVELY TO THE YEARS SHOWN.

OPTION 10 HYDROGRAPH OF DAILY MEAN FLOWS

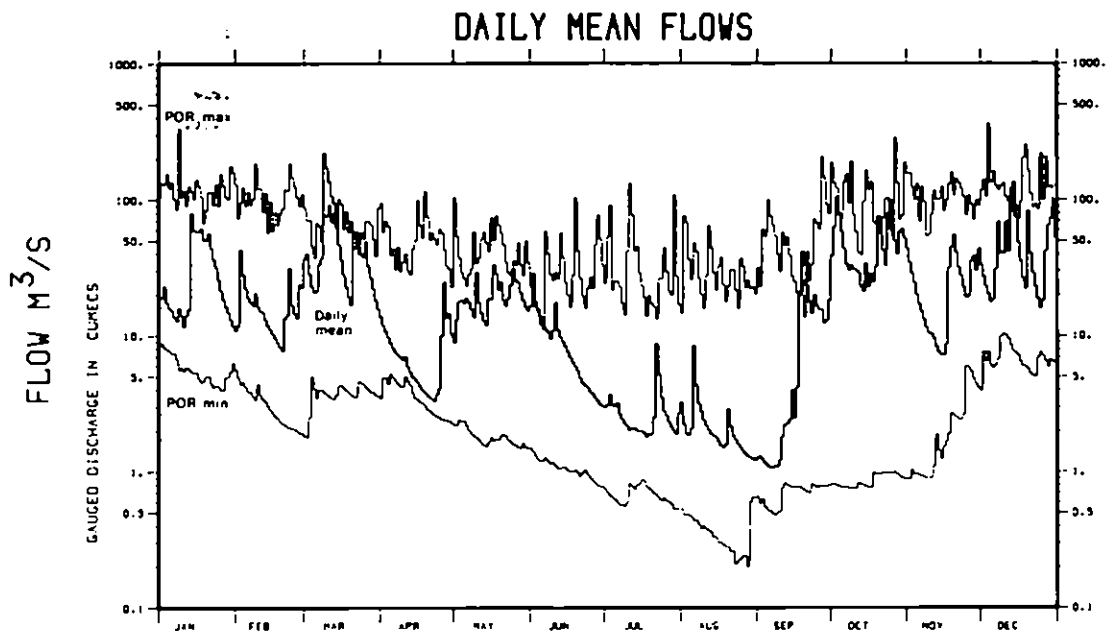
050001

TAW AT UMBERLEIGH

1981

Previous record 1958-1980

Catchment area 826.2 km



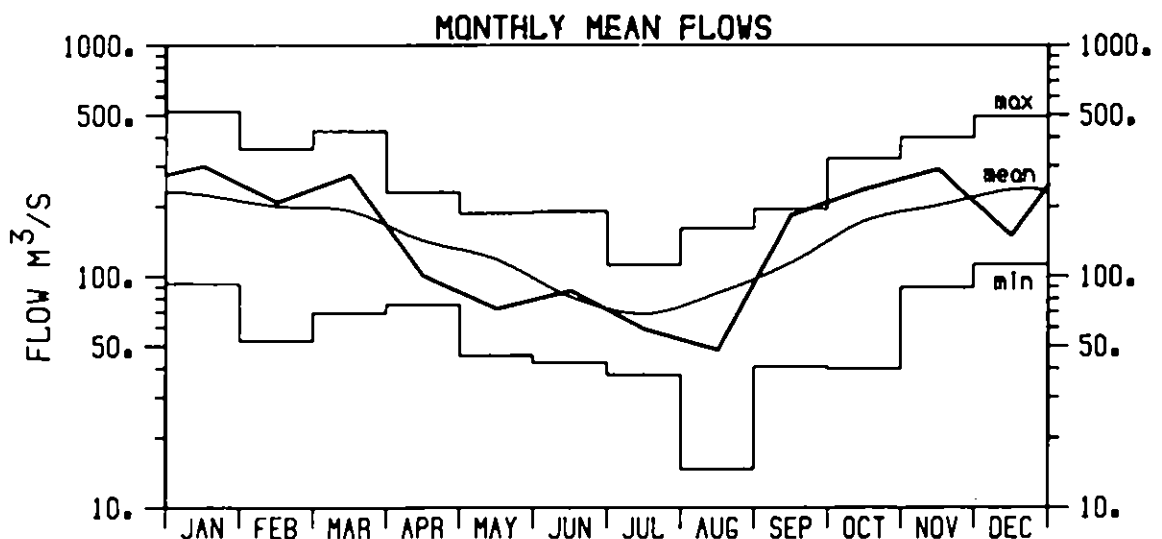
OPTION 11 HYDROGRAPH OF MONTHLY MEAN FLOWS

15006

TAY AT BALLATHIE

1981

Previous record 1953-1980

Catchment area 4587.1 km²

FLOW DURATION TABLE

GAUGED FLOWS USED

1 DAY MEAN FLOW EXCEEDED STATED AMOUNT IN CUNECs FOR GIVEN PERCENTAGE OF TIME

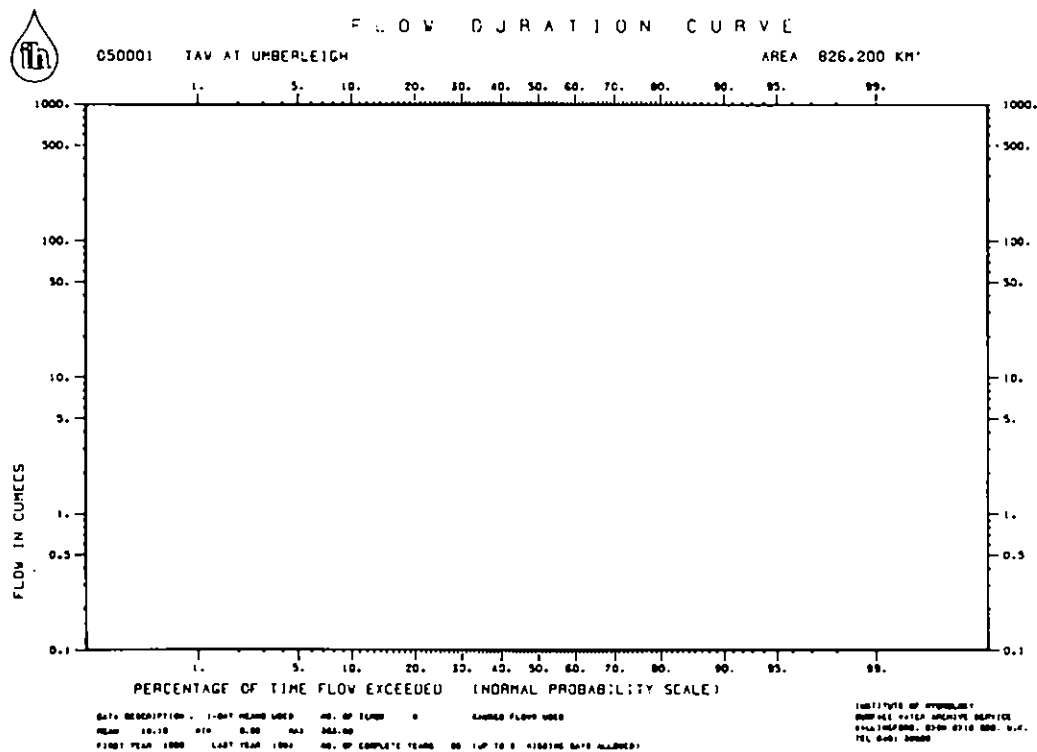
		2	3	4	5	6	7	8	9	
		112.407	88.953	78.112	70.827	64.442	59.554	56.125	53.098	50.148
10	47.474	44.176	41.967	39.864	37.968	36.202	34.666	32.813	31.533	30.169
20	28.878	27.620	26.450	25.366	24.302	23.328	22.350	21.282	20.533	19.756
30	19.052	18.294	17.592	16.975	16.450	15.836	15.263	14.737	14.189	13.691
40	13.254	12.847	12.340	11.914	11.529	11.129	10.807	10.436	10.088	9.725
50	9.366	9.020	8.678	8.390	8.073	7.801	7.535	7.219	6.945	6.673
60	6.428	6.187	5.971	5.755	5.522	5.313	5.096	4.900	4.691	4.492
70	4.292	4.101	3.916	3.738	3.564	3.398	3.239	3.055	2.915	2.783
80	2.959	2.534	2.418	2.287	2.178	2.071	1.976	1.890	1.822	1.734
90	1.647	1.567	1.493	1.391	1.268	1.141	1.019	0.941	0.808	0.685

CATCHMENT AREA 826.2 SQ.KM

FIRST YEAR USED- 1959 LAST YEAR USED- 1984

NUMBER OF YEARS USED- 26

ONLY YEARS CONTAINING NOT MORE THAN 5 MISSING DAYS USED



OPTION 13 TABLE OF GAUGING STATION REFERENCE INFORMATION

NUMBER	RIVER	STATION	GRID REF	OPERATOR	RECORDED 1ST YEAR	LAST YEAR	STN TYPE	BASIN AREA SQ KM	WATER SDB NO	PAE ALT MUD	ADDITIONAL THINGS TO REMARKS	1-6
048001	FOWET	TRELLIVESTEPS	S8227696	SWA	1969		CC	36.8	187.66	420	SNPL	
048003	FAL	TRELOUNT	S8921447	SWA	1977		FLVA	67.0	6.95	226	GL	
048004	WALLEUGAN	TRELOUNT	S8159674	SWA	1969		CC	25.3	70.26	308	L	
048005	KEAWTH	TRURO	S8620450	SWA	1968		CC	19.1	7.18	152	L	
048006	CORER	WELSTON	S8634273	SWA	1968		VA	40.1	4.69	251	PL 1	
048007	KEANALL	PONSANQUITH	S8762377	SWA	1968		C	26.6	13.36	251	SNPL 1	
048009	ST ALUT	CRAIGSMILL WOOD	S8184662	SWA	1971		CC	22.7	70.53	319	GA	
048010	SEATON	TREBROOKBROCK	S8295596	SWA	1972		CC	36.1	26.60	369	C 1	
048011	FOWET	RESTORNEHILL TWO	S1098624	SWA	1972		CC	169.1	9.74	420	SNPL 1	

OPTION 14 TABLE OF HYDROMETRIC STATISTICS

STATION NUMBER	TERM	ANF 1941 1970 MM	ANAL RAIN FALL MM	ANNUAL GAUGED RICHUFF MM	MEAN GAUGED FLOW CU M/S	NO. YRS REC	SPON MEAN FLOW	HIGHEST DAILY MEAN CU M/S	DATE 1-1-1974	LOWEST DAILY MEAN CU M/S	DATE 1-1-1974	10 YR FLL	50 YR FLL	95 YR FLL
021005	POR	1320	1250	676	7.99	15		185.50	30/01/74	1.19	07/10/72	16.40	5.39	1.97
		1977	1436	829	9.60		123	92.38	31/10	1.39	22/08	20.26	7.03	1.65
		1978	1317	757	8.95		112	75.74	15/11	1.25	19/06	10.23	6.03	2.25
		1979	1387	913	10.80		135	82.15	26/11	2.23	23/07	24.39	8.77	2.60
		1980	1288	793	9.36		117	49.29	26/11	2.01	01/06	19.96	7.00	2.19
021006	POR	1227	1180	694	32.99	15		193.40	30/01/74	3.46	07/10/72	66.79	22.22	6.23
		1977	1277	845	40.20		122	555.30	31/10	4.13	18/08	66.42	29.40	5.44
		1978	1244	731	34.77		105	320.30	15/11	5.62	20/06	78.17	22.26	7.01
		1979	1230	881	41.90		127	262.70	26/11	7.21	23/07	93.82	27.64	8.51
		1980	1167	746	35.48		106	171.60	20/11	6.37	19/05	78.63	24.91	7.46
021007	POR	1413	1321	878	13.59	15		209.60	30/01/74	0.57	07/10/72	31.59	8.50	1.71
		1977	1524	1108	17.54		126	288.30	31/10	0.67	18/08	41.40	10.64	1.11
		1978	1394	886	14.02		101	210.60	15/11	0.97	19/07	32.60	8.24	1.21
		1979	1420	1105	17.48		126	120.90	26/11	1.42	24/07	41.36	10.62	1.83
		1980	1366	944	14.93		107	98.07	20/11	1.18	19/05	35.27	9.16	1.55
021008	POR	1006	949	504	17.74	16		308.65	06/03/63	1.71	22/08/76	16.44	11.05	2.69
		1977	1019	604	21.25		120	187.20	31/10	1.99	17/08	44.25	14.81	2.38
		1978	1008	541	19.03		107	177.90	15/11	2.04	20/07	43.34	11.09	2.33
		1979	1005	693	24.40		138	273.10	25/03	2.27	05/08	55.84	15.31	3.67
		1980	982	586	20.67		116	122.00	20/11	3.35	03/06	43.35	14.30	4.14

NOTE: This example illustrates only a limited amount of the statistical information that may be output.

OPTION 15 GAUGING STATION DESCRIPTION

- 48001: FOWET AT TRELLIVESTEPS
Compound Crump weir. Total crest breadth 7.0 m. Low flow crest breadth 1.5 m. Unreliable records from 1969.
- 48003: FAL AT TRELOUNT
Velocity-area station with low flow flume. Unreliable records from 1961.
- 48004: WALLEUGAN AT TRELOUNT
Compound Crump weir. Total crest breadth 10.0 m. Low flow crest breadth 1.5 m.
- 48005: KEAWTH AT TRURO
Compound Crump weir. Total crest breadth 4.5 m. Low flow crest breadth 1.2 m.
- 48006: CORER AT WELSTON
Velocity-area station. Modified in 1977 by the construction of a low level bed control.
- 48007: KEANALL AT PONSANQUITH
Single crest Crump weir 4.9 m broad.
- 48009: ST ALUT AT CRAIGSMILL WOOD
Compound Crump weir. Total crest breadth 7.2 m. Low flow crest breadth 1.6 m.
- 48010: SEATON AT TREBROOKBROCK
Compound Crump weir. Total crest breadth 11.0 m. Low flow crest breadth 3.0 m.
- 48011: FOWET AT RESTORNEHILL TWO
Compound Crump weir. Total crest breadth 16.5 m. Low flow crest breadth 3.5 m.

Concise Register of Gauging Stations

Station number	River name	National Grid reference	Measuring authority	Area (sq km)	Station number	River name	National Grid reference	Measuring authority	Area (sq km)
002001	Helmsdale	NC 99718	HRPB	551.4	020005	Burns Water	NT 457688	FRPB	93.0
003001	Shin	NC 581067	NSHE	494.6	020006	Bie Water	NT 645768	FRPB	51.8
003002	Carron	NH 490920	HRPB	241.1	020007	Gifford Water	NT 511717	FRPB	64.0
003003	Oykel	NC 403001	HRPB	330.7	021001	Fruid Water	NT 088205	LRWD	23.7
003004	Cassley	NC 472022	HRPB	187.5	021002	Whleadadder Water	NT 663633	LRWD	45.6
003005	Shin	NH 574974	HRPB	575.0	021003	Tweed	NT 257400	TWRP	694.0
004001	Conon	NH 482547	HRPB	961.8	021004	Watch Water	NT 664566	BRWD	10.7
004003	Ainess	NH 654695	HRPB	201.0	021005	Tweed	NT 206397	TWRP	373.0
004004	Blackwater	NH 455563	HRPB	336.7	021006	Tweed	NT 498334	TWRP	1500.0
005001	Beaully	NH 426405	NSHE	849.5	021007	Ettrick Water	NT 486315	TWRP	499.0
006001	Ness	NH 639410	NSHE	1792.3	021008	Teviot	NT 702280	TWRP	1110.0
006006	Allt Bhlaradh	NH 377168	NSHE	27.5	021009	Tweed	NT 898477	TWRP	4390.0
006007	Ness	NH 645427	HRPB	1839.1	021010	Tweed	NT 588320	TWRP	2080.0
006008	Fruck	NH 450300	HRPB	105.9	021011	Yarrow Water	NT 439277	TWRP	231.0
007001	Findhorn	NH 826337	HRPB	415.6	021012	Teviot	NT 522159	TWRP	323.0
007002	Findhorn	NJ 018583	HRPB	781.9	021013	Gala Water	NT 479374	TWRP	207.0
007003	Lossie	NJ 198626	NERPB	216.0	021014	Tweed	NT 109785	TWRP	139.0
007004	Nairn	NH 882551	HRPB	313.0	021015	Leader Water	NT 565388	TWRP	239.0
007005	Divie	NJ 005480	HRPB	165.0	021016	Eye Water	NT 942635	TWRP	119.0
008001	Spey	NJ 278439	NERPB	2654.7	021017	Ettrick Water	NT 234132	TWRP	37.5
008002	Spey	NH 881082	NERPB	1011.7	021018	Lynne Water	NT 209401	TWRP	175.0
008003	Spey	NN 759996	NERPB	533.8	021019	Manor Water	NT 217369	TWRP	61.6
008004	Avon	NJ 186357	NERPB	542.8	021020	Yarrow Water	NT 309247	TWRP	155.0
008005	Spey	NH 946191	NERPB	1267.8	021021	Tweed	NT 752354	TWRP	3330.0
008006	Spey	NJ 318518	NERPB	2861.2	021022	Whleadadder Water	NT 881550	TWRP	503.0
008007	Spey	NN 687962	NERPB	400.4	021023	Leet Water	NT 839396	TWRP	113.0
008008	Tromie	NN 789995	NERPB	130.3	021024	Jed Water	NT 655214	TWRP	139.0
008009	Dulnain	NH 977247	NERPB	272.7	021025	Ale Water	NT 634244	TWRP	174.0
008010	Spey	NJ 034268	NERPB	1748.8	021026	Tina Water	NT 278138	TWRP	31.0
009001	Deveron	NJ 532464	NERPB	441.6	021027	Blackadder Water	NT 826530	TWRP	159.0
009002	Deveron	NJ 705498	NERPB	954.9	021030	Megget Water	NT 231232	TWRP	56.2
009003	Isle	NJ 494506	NERPB	176.1	021031	Till	NT 927396	NWA	648.0
009004	Bogie	NJ 519373	NERPB	179.0	021032	Glen	NT 919310	NWA	198.9
010001	Ythan	NJ 924308	NERPB	448.1	021034	Yarrow Water	NT 788244	TWRP	116.0
010002	Ugie	NK 01485	NERPB	325.0	022001	Coquet	NU 234044	NWA	569.8
010003	Ythan	NJ 947303	NERPB	523.0	022002	Coquet	NT 870083	NWA	59.5
011001	Don	NJ 887141	NERPB	1273.0	022003	Usway Burn	NT 886077	NWA	21.4
011002	Don	NJ 756201	GRWD	787.0	022004	Aln	NU 711129	NWA	205.0
011003	Don	NJ 566170	NERPB	499.0	022006	Blyth	NZ 243800	NWA	269.4
012001	Dee	NO 635956	NERPB	1370.0	022007	Wansbeck	NZ 175858	NWA	287.3
012002	Dee	NO 798983	NERPB	1844.0	022008	Abbin	NT 925063	NWA	27.7
012003	Dee	NO 343965	NERPB	690.0	022009	Coquet	NU 067016	NWA	346.0
012004	Girnock Burn	NO 324956	NERPB	30.3	023001	Tyne	NZ 038617	NWA	2175.6
012005	Muck	NO 364947	NERPB	110.0	023002	Derwent	NZ 041508	NWA	118.0
012006	Garn	NO 352971	NERPB	150.0	023003	North Tyne	NY 906732	NWA	1007.5
012007	Dee	NO 098895	NERPB	289.0	023004	South Tyne	NY 856647	NWA	751.1
013001	Barvie	NO 826733	NERPB	123.0	023005	North Tyne	NY 776861	NWA	284.9
013002	Luther Water	NO 606668	TRPB	138.0	023006	South Tyne	NY 672611	NWA	321.9
013003	South Esk	NO 583593	TRPB	487.0	023007	Derwent	NZ 168581	NWA	242.1
013005	Lunan Water	NO 655494	TRPB	124.0	023008	Reds	NY 868882	NWA	343.8
013007	North Esk	NO 696640	TRPB	730.0	023009	South Tyne	NY 716465	NWA	118.5
013008	South Esk	NO 600596	TRPB	490.0	023010	Tarsar Burn	NY 789879	NWA	96.0
014001	Eden	NO 415158	TRPB	307.4	023011	Kielder Burn	NY 644946	NWA	58.8
014002	Dightly Water	NO 477324	TRPB	126.9	023012	East Allen	NY 807583	NWA	88.0
015001	Isle	NO 187647	TRWS	70.7	023013	West Allen	NY 781583	NWA	75.1
015002	Newton Burn	NO 230605	TRWS	15.4	023014	North Tyne	NY 631931	NWA	27.0
015003	Tay	NO 082395	TRPB	3211.0	023015	North Tyne	NY 924771	NGWC	1043.8
015004	Inzion	NO 780559	TRWS	24.7	024001	Wear	NZ 264376	NWA	657.8
015005	Melgan	NO 275558	TRWS	40.9	024002	Gaunless	NZ 215306	NWA	93.0
015006	Tay	NO 147367	TRPB	4587.1	024003	Wear	NY 984391	NWA	171.9
015007	Tay	NN 924534	TRPB	1149.4	024004	Bedburn Beck	NZ 118322	NWA	74.9
015008	Dean Water	NO 340479	TRPB	177.1	024005	Brownie	NZ 259387	NWA	178.5
015010	Isle	NO 295466	TRPB	366.5	024006	Rookhope Burn	NY 952390	NWA	36.5
015011	Lyon	NN 786486	TRPB	391.1	024007	Brownie	NZ 165462	NWA	44.6
015012	Tummel	NN 940577	TRPB	1649.0	024008	Wear	NZ 174309	NWA	455.0
015013	Almond	NO 067758	TRPB	174.8	024009	Wear	NZ 283512	NWA	1008.3
015016	Tay	NN 782467	TRPB	600.9	025001	Tees	NZ 259137	NWA	818.4
015017	Braan	NN 979406	TRPB	197.0	025002	Tees	NY 932760	NWA	217.3
015018	Lyon	NN 534448	NSHE	161.4	025003	Trout Beck	NY 759336	NWA	11.4
015023	Braan	NO 014422	TRPB	210.0	025004	Skerne	NZ 284129	NWA	250.1
015024	Dochart	NN 567320	TRPB	239.0	025005	Leven	NZ 445127	NWA	196.3
016001	Earn	NN 933167	TRPB	590.5	025006	Greta	NZ 034122	NWA	86.1
016002	Earn	NN 754216	TRPB	176.9	025007	Clow Beck	NZ 282101	NWA	78.2
016003	Ruchall Water	NN 764704	TRPB	99.5	025008	Tees	NZ 047166	NWA	509.2
016004	Earn	NO 043184	TRPB	782.2	025009	Tees	NZ 364105	NWA	1264.0
017001	Carron	NS 832820	FRPB	122.3	025010	Baydale Beck	NZ 260156	NWA	31.1
017002	Leven	NO 369006	FRPB	424.0	025011	Langdon Beck	NY 852309	NWA	13.0
017003	Bonny Water	NS 874804	FRPB	50.5	025012	Harwood Beck	NY 849309	NWA	25.1
017004	Ore	NT 330997	FRPB	162.0	025013	Billingham Beck	NZ 408237	NWA	61.4
017005	Avon	NS 952797	FRPB	195.3	025014	Mordon Stoll	NZ 323274	NWA	2.5
018001	Allan Water	NN 792053	FRPB	161.0	025015	Woodham Burn	NZ 285263	NWA	29.1
018002	Devon	NS 858960	FRPB	181.0	025018	Tees	NY 950250	NWA	242.1
018003	Taith	NN 725011	FRPB	518.0	025019	Leven	NZ 585087	NWA	14.8
018005	Allan Water	NS 786980	FRPB	210.0	025020	Skerne	NZ 297738	NWA	147.0
018008	Lenny	NN 585096	FRPB	190.0	025021	Skerne	NZ 318285	NWA	70.1
018011	Forth	NS 775955	FRPB	1036.0	025022	Balder	NY 931187	NWA	20.4
019001	Almond	NT 165752	FRPB	369.0	025023	Tees	NY 813288	NWA	58.7
019002	Almond	NT 004652	FRPB	43.8	025024	Chape Beck	NZ 599163	NWA	13.4
019003	Brech Water	NT 014639	FRPB	51.8	026001	West Beck	TA 064560	YWA	192.0
019004	North Esk	NT 252616	FRPB	81.6	026002	Hull	TA 080498	YWA	378.1
019005	Almond	NT 086686	FRPB	229.0	026003	Foston Beck	TA 093548	YWA	57.2
019006	Water	NT 228737	FRPB	107.0	026004	Gypsy Race	TA 165675	YWA	253.8
019007	Esk	NT 339723	FRPB	330.0	026005	Gypsy Race	TA 137677	YWA	240.0
019008	South Esk	NT 325623	FRPB	112.0	026006	Elmswell Beck	TA 009575	YWA	136.0
019009	Bog Burn	NT 076591	FRPB	8.5	027001	Nidd	SE 428530	YWA	484.3
019010	Braid Burn	NT 273707	FRPB	16.2	027002	Wharfe	SE 422473	YWA	758.9
019011	North Esk	NT 333678	FRPB	137.0	027003	Aire	SE 534255	YWA	1932.1
020001	Tyne	NT 591768	FRPB	307.0	027004	Calder	SE 365270	YWA	899.0
020002	West Potter Burn	NT 489811	FRPB	26.2	027005	Nidd	SE 147683	YWA	113.7
020003	Tyne	NT 456689	FRPB	161.0	027006	Don	SK 390910	YWA	373.0
020004	East Potter Burn	NT 510824	FRPB	31.1	027007	Ure	SE 356671	YWA	914.6
					027008	Swale	SE 415748	YWA	1345.6
					027009	Ouse	SE 568554	YWA	3315.0
					027010	Hodge Beck	SE 627944	YWA	18.9
					027011	Washburn	SE 219488	YWA	87.3
					027012	Hebden Water	SD 973309	YWA	36.0
					027013	Ewerden Beck	SK 289957	YWA	26.4
					027014	Rye	SE 743771	YWA	679.0
					027015	Derwent	SE 714557	YWA	1634.3
					027016	Little Don	SK 253992	YWA	38.6
					027017	Losley	SK 286906	YWA	43.5
					027018	Ryburn	SE 025187	YWA	10.7

Station number	River name	National Grid reference	Measuring authority	Area (sq km)	Station number	River name	National Grid reference	Measuring authority	Area (sq km)
027019	Booth Dean Clough	SE 033166	YWA	15.9	029007	Great Fau	TF 416793	AWA	77.4
027020	Scout Oke Stream	SE 236047	YWA	15.2	029003	Lud	TF 337879	AWA	55.2
027021	Don	SE 569040	YWA	1756.2	029004	Ancholme	TF 032911	AWA	54.7
027022	Don	SK 427928	YWA	876.0	029005	Rase	TF 032912	AWA	69.7
027023	Dearne	SF 350073	YWA	118.9	029009	Ancholme	TF 033877	AWA	27.2
027024	Sowle	NZ 146006	YWA	381.0					
027025	Rother	SK 437857	YWA	352.2	030001	Witham	SK 842480	AWA	292.9
027026	Rother	SK 394744	YWA	165.0	030002	Barlings Fau	TF 066766	AWA	210.1
027027	Wharfe	SE 112481	YWA	443.0	030003	Barn	TF 241611	AWA	197.1
027028	Aire	SE 281340	YWA	691.5	030004	Partney Lymn	TF 402676	AWA	61.6
027029	Caldor	SE 124219	YWA	341.9	030005	Witham	SK 927335	AWA	126.1
027030	Dearne	SE 477020	YWA	310.8	030006	Slea	TF 088485	AWA	48.4
027031	Colne	SE 174199	YWA	245.0	030011	Barn	TF 246795	AWA	62.5
027032	Hebden Beck	SE 025643	YWA	6.8	030012	Stanfield Beck	TF 127739	AWA	37.4
027033	Sea Cut	TA 078908	YWA	33.2	030013	Heighington Beck	TF 042696	AWA	21.2
027034	Ure	SE 190860	YWA	510.2	030014	Pontoon Lode	TF 128313	AWA	11.9
027035	Aire	SE 013457	YWA	282.3	030015	Crimble Brook	SK 975797	AWA	50.5
027036	Derwent	SE 789715	YWA	1421.0	030017	Witham	SK 929246	AWA	51.3
027038	Costa Beck	SE 774836	YWA	7.8					
027039	Holme	SE 112069	YWA	9.1	031001	Eye Brook	SP 853941	COWC	60.1
027040	Doe Lea	SK 443746	YWA	67.9	031002	Glen	TF 106149	AWA	341.9
027041	Derwent	SE 731587	YWA	1586.0	031004	Wakland	TF 095078	AWA	717.4
027042	Dove	SE 705855	YWA	51.8	031005	Wakland	SP 970997	AWA	417.0
027043	Wharfe	SE 092494	YWA	477.0	031006	Gwash	TF 038097	AWA	150.0
027044	Blackfoss Beck	SE 725475	YWA	46.0	031007	Wakland	SP 948999	AWA	398.9
027047	Snaresholme Beck	SD 833883	YWA	10.2	031008	East Glen	TF 068160	AWA	136.2
027048	Derwent	SE 990853	YWA	127.0	031009	West Glen	TF 074113	AWA	173.0
027049	Rye	SE 696791	YWA	277.0	031010	Chater	SK 961030	AWA	68.9
027050	Esk	NZ 885081	YWA	308.0	031011	West Glen	SK 987261	AWA	31.6
027051	Crimple	SE 284519	YWA	8.1	031012	Tham	TF 016179	AWA	24.9
027052	Whitting	SK 376747	YWA	50.2	031013	East Glen	TF 038721	AWA	71.5
027053	Nidd	SE 230603	YWA	217.6	031014	Gumsthorpe Brook	TF 046203	AWA	21.0
027054	Hodge Beck	SE 652907	YWA	37.1	031015	Chater	SK 848037	AWA	18.5
027055	Rye	SE 560883	YWA	131.7	031016	North Brook	SK 957089	AWA	36.5
027056	Pickering Beck	SE 791819	YWA	68.6	031017	Stanton Brook	SP 759918	AWA	42.7
027057	Seven	SE 736821	YWA	121.6	031018	Langton Brook	SP 755908	AWA	55.1
027058	Riccal	SE 661810	YWA	57.6	031019	Medbourne Brook	SP 798939	AWA	21.9
027059	Laver	SE 301710	YWA	87.5	031020	Morcott Brook	SK 939018	AWA	19.6
027060	Kyle	SE 509602	YWA	167.6	031021	Wakland	SP 819915	AWA	250.7
027061	Colne	SE 136161	YWA	77.3	031022	Jordan	SP 740867	AWA	20.8
027062	Nidd	SF 482561	YWA	516.0	031023	West Glen	SK 965258	AWA	4.4
027063	Dibb	SE 557839	YWA	25.5	031024	Holwell Brook	TF 026148	AWA	22.3
027064	Went	SE 551163	YWA	83.7	031025	Gwash South Arm	SK 875051	AWA	24.5
027065	Holme	SE 142157	YWA	97.4	031026	Egleton Brook	SK 878073	AWA	2.5
027066	Blackburn Brook	SK 393914	YWA	42.8	031027	Bourne Eau	TF 107199	AWA	10.6
027067	Sheaf	SK 357863	YWA	49.1	031028	Gwash	SK 951082	AWA	76.5
027068	Ryburn	SE 035188	YWA	33.0					
027069	Wiske	SF 375844	YWA	215.5	032001	Nene	TL 166972	AWA	1634.3
027071	Swale	SE 425734	YWA	1363.0	032002	Willow Brook	TL 067933	AWA	89.6
027072	Worth	SE 064408	YWA	71.7	032003	Harpers Brook	SP 983799	AWA	74.3
027073	Brompton Beck	SF 936794	YWA	12.9	032004	Ize Brook	SP 898715	AWA	194.0
027074	Spenn Beck	SF 725210	YWA	46.3	032005	Nene/Kislingbury	SP 721592	AWA	273.0
					032007	Nene/Brampton	SP 747617	AWA	232.8
028001	Derwent	SK 198851	STWA	126.0	032008	Nene/Kislingbury	SP 627607	AWA	107.0
028002	Blithe	SK 109197	STWA	163.0	032012	Wootton Brook	SP 736571	AWA	53.1
028003	Tame	SP 169915	STWA	408.0	032015	Willow Bl Central	SP 898892	AWA	7.1
028004	Tame	SP 206935	STWA	195.0	032016	Willow Brook Sth	SP 901886	AWA	7.6
028005	Tame	SK 173105	STWA	1475.0	032018	Ize	SP 861831	AWA	62.4
028006	Trant	SJ 994231	STWA	325.0	032019	Ize	SP 873763	AWA	58.3
028007	Trant	SK 448799	STWA	4400.0	032020	Wittering Brook	TL 089995	AWA	46.9
028008	Dove	SK 112397	STWA	399.0	032023	Grendon Brook	SP 883633	AWA	47.5
028009	Trant	SK 620399	STWA	7486.0	032024	Southwick Brook	TL 025921	AWA	20.5
028010	Derwent	SK 356363	STWA	1054.0	032025	Nene/Whiton	SP 670658	AWA	63.4
028011	Derwent	SK 296586	STWA	690.0	032026	Nene/Brampton	SP 736707	AWA	58.0
028012	Trant	SK 131177	STWA	1229.0	032027	Billing Brook	TL 117949	AWA	24.3
028014	Sow	SJ 975215	STWA	591.0	032029	Flore	SP 660610	AWA	7.0
028015	Idle	SK 690895	STWA	529.0	032030	Colton Mill Stream	SP 669714	AWA	8.1
028016	Ryton	SK 641897	STWA	231.0	032031	Wootton Brook	SP 726577	AWA	73.9
028017	Devon	SK 787486	STWA	284.0					
028018	Dove	SK 235288	STWA	883.2	033001	Bedford Ouse	TL 369727	AWA	3030.0
028019	Trant	SK 739704	STWA	3072.0	033002	Bedford Ouse	TL 055495	AWA	1460.0
028020	Churnet	SK 103389	STWA	236.0	033003	Cam	TL 508657	AWA	803.0
028021	Derwent	SK 443327	STWA	1175.0	033004	Lark	TL 648760	AWA	466.2
028022	Trant	SK 801601	STWA	8231.0	033005	Bedford Ouse	SP 736353	AWA	388.5
028023	Wye	SK 182696	STWA	154.0	033006	Wissay	TL 771965	AWA	274.5
028024	Wreake	SK 615124	STWA	413.8	033007	Nar	TF 723119	AWA	153.3
028025	Sence	SP 321996	STWA	169.4	033008	Little Ouse	TL 850832	AWA	699.0
028026	Anker	SK 263034	STWA	368.0	033009	Bedford Ouse	SP 951565	AWA	1320.0
028027	Frewash	SK 482364	STWA	180.7	033011	Little Ouse	TL 897801	AWA	128.7
028028	Soar	SK 603109	STWA	480.0	033012	Kym	TL 155631	AWA	137.5
028029	Kingston Brook	SK 503277	STWA	57.0	033013	Sapiston	TL 896791	AWA	205.9
028030	Black Brook	SK 466171	STWA	8.4	033014	Lark	TL 758730	AWA	277.0
028031	Manifold	SK 140507	STWA	148.5	033015	Ouzel	SP 882408	AWA	277.1
028032	Vaden	SK 558680	STWA	62.8	033016	Cam	TL 450593	AWA	761.5
028033	Dove	SK 063668	STWA	8.0	033018	Tove	SP 714488	AWA	138.7
028034	Maun	SK 681728	STWA	161.0	033019	Alton	TL 880830	AWA	316.0
028035	Leen	SK 549392	STWA	111.0	033020	Alconbury Brook	TL 208717	AWA	201.5
028036	Poulter	SK 700757	STWA	128.2	033021	Rhee	TL 415523	AWA	303.0
028038	Manifold	SK 106595	STWA	46.0	033022	Ivel	TL 153509	AWA	541.3
028039	Rea	SP 071847	STWA	74.0	033023	Lee Brook	TL 662733	AWA	101.8
028040	Trant	SJ 892467	STWA	53.2	033024	Cam	TL 466506	AWA	194.0
028041	Hamps	SK 082502	STWA	39.6	033025	Babington	TF 696256	AWA	39.6
028042	Churnet	SJ 979520	STWA	136.0	033026	Bedford Ouse	TL 216669	AWA	2570.0
028043	Derwent	SK 261683	STWA	335.0	033027	Rhee	TL 333485	AWA	119.1
028044	Poulter	SK 563714	STWA	65.0	033028	Fitt	TL 143393	AWA	119.6
028045	Meden	SK 681732	STWA	106.2	033029	Stringside	TF 716006	AWA	93.5
028046	Dove	SK 146509	STWA	83.0	033031	Broughton Brook	SP 889408	AWA	66.6
028047	Oldcoates Dyke	SK 615876	STWA	85.2	033032	Heacham	TF 685375	AWA	89.3
028048	Amber	SK 376570	STWA	139.0	033033	Ku	TL 190379	AWA	108.0
028049	Ryton	SK 575794	STWA	77.0	033034	Little Ouse	TL 851844	AWA	699.3
028050	Torne	SE 646012	STWA	141.0	033035	Ely Ouse	TF 588010	AWA	3430.0
028051	Soar	SP 551485	STWA	202.0	033037	Bedford Ouse	SP 877443	AWA	800.0
028052	Sow	SK 883270	STWA	163.0	033039	Bedford Ouse	TL 160535	AWA	1660.0
028053	Penk	SJ 973144	STWA	272.0	033040	Rhee	TL 267401	AWA	1.0
028054	Sence	SP 566985	STWA	133.0	033044	Thet	TL 957855	AWA	277.8
028055	Fcclesbourne	SK 320447	STWA	50.4	033045	Wittle	TM 027878	AWA	28.3
028056	Rothley Brook	SK 580121	STWA	94.0	033046	Thet	TL 996923	AWA	145.3
028058	Henmore Brook	SK 188486	STWA	42.0	033049	Stanford Water	TL 834953	AWA	43.5
028059	Maun	SK 548623	STWA	28.8	033050	Snail	TL 631703	AWA	60.6
028060	Dover Beck	SK 653479	STWA	69.0	033051	Cam	TL 505426	AWA	141.0
028061	Churnet	SJ 983570	STWA	139.0	033052	Swalham Lode	TL 553628	AWA	38.4
028066	Cole	SP 183874	STWA	130.0	033054	Bahngley	TF 680752	AWA	47.7
028067	Derwent	SK 438316	STWA	1177.5	033055	Granta	TF 510504	AWA	98.7
028070	Burbage Brook	SK 259804	STWA	9.1	033056	Quy Water	TL 531627	AWA	76.4
028072	Greet	SK 711541	STWA	46.2	033057	Ouzel	SP 917241	AWA	119.0
028073	Ashup	SK 711896	STWA	47.0	033058	Ouzel	SP 883372	AWA	215.0
028080	Tame	SP 207937	STWA	799.0	033060	Kings Dike	TL 208973	AWA	1.0
					033063	Little Ouse	TL 955807	AWA	101.0
029001	Waite Beck	TA 253016	AWA	108.3	033064	Whaddon Brook	TL 359466	AWA	16.0

Station number	River name	National Grid reference	Measuring authority	Area (sq km)	Station number	River name	National Grid reference	Measuring authority	Area (sq km)
033065	Hiz	TL 185290	AWA	6.8	039007	Blackwater	SU 731648	TWA	354.8
033066	Granta	TL 570464	AWA	59.8	039008	Thames	SP 445087	TWA	1616.2
033067	New River	TL 608898	AWA	19.6	039009	Thames	SU 909797	TWA	6815.3
033068	Cheney Water	TL 296411	AWA	5.0	039010	Colne	TQ 052864	TWA	743.0
034001	Yare	TG 182082	AWA	231.8	039011	Wey	SU 874433	TWA	396.3
034002	Tas	TM 226994	AWA	146.5	039012	Hogsmill	TQ 182688	TWA	69.1
034003	Bure	TG 192298	AWA	184.7	039013	Colne	TQ 123987	TWA	352.2
034004	Wensum	TG 177128	AWA	536.1	039014	Ver	TL 151016	TWA	132.0
034005	Tud	TG 170113	AWA	73.2	039015	Whitewater	SU 731523	TWA	44.5
034006	Waveney	TM 229811	AWA	370.0	039016	Kennet	SU 649708	TWA	1033.4
034007	Dove	TM 174772	AWA	133.9	039017	Ray	SP 680211	IM	18.6
034008	Ani	TG 331270	AWA	49.3	039018	Ock	SU 486969	TWA	234.1
034010	Waveney	TM 168782	AWA	149.4	039019	Lambourn	SU 470682	TWA	234.1
034011	Wensum	TF 919294	AWA	127.1	039020	Coln	SU 122062	TWA	106.7
034012	Burn	TF 842428	AWA	80.0	039021	Cherwell	SP 482183	TWA	551.7
034013	Waveney	TM 364917	AWA	670.0	039022	Loddon	SU 720652	TWA	164.5
034014	Wensum	TG 020184	AWA	363.0	039023	Wye	SU 898867	TWA	137.3
034018	Stiffkey	TF 944414	AWA	77.1	039024	Garwick Stream	TQ 288402	TWA	31.1
034019	Bure	TG 267194	AWA	313.0	039025	Enbourne	SU 568648	TWA	147.6
035001	Gipping	TM 154441	AWA	310.8	039026	Cherwell	SP 458411	TWA	199.4
035002	Deben	TM 327534	AWA	163.1	039027	Pang	SU 634786	TWA	170.9
035003	Alde	TM 360601	AWA	63.9	039028	Dun	SU 321685	TWA	101.3
035004	Ore	TM 359583	AWA	54.9	039029	Tillingbourne	TQ 000478	TWA	59.0
035008	Gipping	TM 058578	AWA	128.9	039030	Gade	TQ 082952	TWA	184.0
035009	Blyth	TM 425765	AWA	96.4	039031	Lambourn	SU 4111731	TWA	176.0
035010	Gipping	TM 127465	AWA	298.0	039032	Lambourn	SU 390745	TWA	154.0
035011	Belstead Brook	TM 143420	AWA	40.4	039033	Winterbourne St	SU 453694	TWA	49.2
035013	Blyth	TM 406769	AWA	92.9	039034	Everlode	SP 448099	TWA	430.0
036001	Stour	TM 042340	FWC	844.3	039035	Churn	SU 076963	TWA	124.3
036002	Glem	TL 846472	AWA	87.3	039036	Lea Brook	TQ 045468	TWA	16.0
036003	Box	TL 985378	AWA	53.9	039037	Kennet	SU 187688	TWA	142.0
036004	Chad Brook	TL 868459	AWA	47.4	039038	Thames	SP 670055	TWA	443.0
036005	Brett	TM 025429	AWA	158.0	039040	Thames	SP 054942	TWA	185.0
036006	Stour	TM 020344	AWA	578.0	039042	Leach	SU 227994	TWA	76.9
036007	Belchamp Brook	TL 848421	AWA	58.6	039043	Kennet	SU 295710	TWA	295.0
036008	Stour	TL 827463	AWA	224.5	039044	Hart	SU 755593	TWA	84.0
036009	Brett	TL 914525	AWA	75.7	039049	Thames	SU 516946	TWA	3414.0
036010	Bumpstead Brook	TL 689418	AWA	28.3	039051	Silk Stream	TQ 217895	GLC	29.0
036011	Stour Brook	TL 696441	AWA	34.5	039052	Sor Brook	SP 475346	TWA	106.4
036012	Stour	TL 708450	AWA	76.7	039053	The Cut	SU 853713	TWA	50.2
036013	Brett	TM 032354	AWA	195.0	039054	Mole	TQ 271434	TWA	89.9
036015	Stour	TL 897358	AWA	480.7	039055	Mole	TQ 260399	TWA	31.8
036016	Ramsay	TM 206288	AWA	13.9	039056	Yeading Bk West	TQ 083846	GLC	175.7
036017	Ely Ouse outfall	TL 681559	AWA		039057	Revensbourne	TQ 372732	GLC	67.6
037001	Roding	TQ 415884	TWA	303.3	039058	Crane	TQ 103778	GLC	616.5
037002	Chelmer	TL 794090	AWA	533.9	039059	Pool	TQ 371725	GLC	38.3
037003	Ter	TL 786107	AWA	77.8	039068	Mole	TQ 179502	TWA	316.0
037004	Blackwater	TL 836092	AWA	337.0	039071	Mole	TQ 262482	TWA	142.0
037005	Colne	TL 962261	AWA	238.2	039072	Thames	SU 007973	TWA	63.7
037006	Can	TL 890072	AWA	228.4	039073	Thames	SU 982773	TWA	7046.0
037007	Wid	TL 686060	AWA	136.3	039074	Churn	SP 020028	TWA	84.0
037008	Chelmer	TL 713071	AWA	190.3	039075	Ampney Brook	SU 105950	TWA	74.4
037009	Bran	TL 818147	AWA	60.7	039075	Marston Meysay Bk	SU 128964	TWA	25.0
037010	Blackwater	TL 845158	AWA	247.3	039076	Windrush	SP 299107	TWA	296.0
037011	Chelmer	TL 629233	AWA	72.6	039077	Og	SP 194967	TWA	59.2
037012	Colne	TL 771364	AWA	65.1	039078	Wey(north)	SU 838462	TWA	118.4
037013	Sandon Brook	TL 755055	AWA	80.6	039081	Ock	SU 481966	TWA	234.0
037014	Roding	TL 561040	TWA	95.1	039085	Wandle	TQ 266703	GLC	176.1
037015	Cripsey Brook	TL 548035	TWA	62.2	039086	Garwick Stream	TQ 285417	TWA	33.8
037016	Part	TL 668313	AWA	62.5	039087	Ray	SU 121935	TWA	84.1
037017	Blackwater	TL 793243	AWA	139.2	039088	Chess	TQ 066947	TWA	105.0
037018	Inglebourne	TQ 553862	TWA	47.9	040001	Medway	TQ 407353	SWA	26.9
037019	Beam	TQ 515853	TWA	49.7	040002	Darwell	TQ 722213	SWA	9.6
037020	Chelmer	TL 670193	AWA	132.1	040003	Medway	TQ 708530	SWA	1256.1
037021	Roman	TL 985705	AWA	52.6	040004	Rother	TQ 773245	SWA	206.0
037022	Holland Brook	TM 179212	AWA	54.9	040005	Bault	TQ 758478	SWA	277.1
037023	Roding	TQ 442955	TWA	269.0	040006	Bourne	TQ 632497	SWA	50.3
037024	Colne	TL 855298	AWA	154.2	040007	Medway	TQ 517405	SWA	255.1
037025	Bourne Brook	TL 822276	AWA	32.1	040008	Great Stour	TR 049470	SWA	230.0
037026	Tenpenny Brook	TM 079207	AWA	29.0	040009	Tese	TQ 718399	SWA	136.2
037027	Suspenny Brook	TM 054214	AWA	5.1	040010	Eden	TQ 520437	SWA	224.3
037028	Bentley Brook	TM 109193	AWA	12.1	040011	Great Stour	TR 116554	SWA	345.0
037029	St Oysth Brook	TM 134159	AWA	8.0	040012	Darent	TQ 551718	TWA	191.4
037030	Holland Brook	TM 171217	AWA	48.6	040013	Darent	TQ 525584	TWA	100.5
037033	Eastwood Brook	TQ 859888	AWA	10.4	040014	Wingham	TR 276576	SWA	37.7
037034	Mardyke	TQ 596806	AWA	90.7	040015	White Dran	TR 055606	SWA	31.8
037038	Ely Ouse Outfall	TL 646351	AWA		040016	Gray	TQ 511746	TWA	119.7
037037	Toppsfield Brook	TL 675377	AWA		040017	Dudwell	TQ 679240	SWA	27.5
037038	Wid	TL 672000	AWA	98.8	040018	Darent	TQ 530643	TWA	118.4
037039	Blackwater	TL 835090	AWA	337.0	040020	Eridge Stream	TQ 522367	SWA	53.7
038001	Lee	TL 390092	TWA	1038.0	040021	Headen Channel	TQ 813290	SWA	32.4
038002	Ash	TL 393148	TWA	78.7	040022	Great Stour	TQ 973423	SWA	72.5
038003	Mimram	TL 282133	TWA	133.9	040023	East Stour	TR 017407	AWA	77.7
038004	Rib	TL 360174	TWA	136.5	040024	Bartley Mill St	TQ 633357	SWA	25.1
038005	Ash	TL 380138	TWA	85.2	041001	Nuningham Stream	TQ 662129	SWA	16.9
038006	Rib	TL 335158	TWA	148.1	041002	Ash Bourne	TQ 684141	SWA	18.4
038007	Canons Brook	TL 431104	TWA	21.4	041003	Cuckmere	TQ 533051	SWA	134.7
038011	Mimram	TL 225169	TWA	98.7	041004	Ouse	TQ 433148	SWA	395.7
038012	Stevens Brook	TL 274211	TWA	36.0	041005	Ouse	TQ 429214	SWA	180.9
038013	Upper Lee	TL 118185	TWA	70.7	041006	Uck	TQ 459190	SWA	87.8
038014	Salmon Brook	TQ 343937	TWA	20.5	041009	Rother	TQ 034178	SWA	345.8
038015	Intercepting dr	TQ 355932	TWA	7.4	041010	Adur W Branch	TQ 178197	SWA	109.1
038018	Stanstead Springs	TL 500246	TWA		041011	Rother	SU 852229	SWA	154.0
038017	Mimram	TL 184212	TWA	39.1	041012	Adur E Branch	TQ 219190	SWA	93.3
038018	Upper Lee	TL 299099	TWA	150.0	041013	Huggletts Stream	TQ 671138	SWA	14.2
038019	Salmons Brook	TQ 354932	TWA	33.9	041014	Arun	TQ 047229	SWA	379.0
038020	Cobbins Brook	TQ 387999	TWA	38.4	041015	Ems	SU 755074	SWA	58.3
038021	Turkey Brook	TQ 359985	TWA	42.2	041016	Cuckmere	TQ 611150	SWA	18.7
038022	Pymmes Brook	TQ 340925	TWA	42.6	041017	Combehaven	TQ 765102	SWA	30.5
038023	Lee flood relief	TQ 356880	TWA	1243.0	041018	Kird	TQ 044256	SWA	66.8
038024	Small River Lee	TQ 370988	TWA	41.5	041019	Arun	TQ 117331	SWA	139.0
038025	Pymmes Brook	TQ 340925	TWA	41.4	041020	Bevern Stream	TQ 423161	SWA	34.6
038026	Pincey Brook	TL 495126	TWA	54.6	041021	Clayhill Stream	TQ 448153	SWA	7.1
038028	Stansted Brook	TL 506241	TWA	25.9	041022	Lod	SU 931223	SWA	52.0
038029	Quin	TL 392248	TWA	50.4	041023	Lavant	SU 871064	SWA	87.2
038030	Beane	TL 325131	TWA	175.1	041024	Shall Brook	TQ 335286	SWA	22.6
038131	Rye Meads outfall				041025	Losswood Stream	TQ 060309	SWA	91.6
039001	Thames	TQ 177698	TWA	9948.0	041026	Cockhaise Brook	TQ 376262	SWA	36.1
039002	Thames	SU 568935	TWA	3444.7	041027	Rother	SU 772270	SWA	37.2
039003	Wandle	TQ 285705	GLC	176.1	041028	Chess Stream	TQ 217173	SWA	24.0
039004	Wandle	TQ 298655	GLC	122.0	042001	Wallington	SU 587075	SWA	111.0
039005	Beverley Brook	TQ 216717	GLC	43.6	042002	Iichen	SU 467213	SWA	
039006	Windrush	SP 402019	TWA	382.6	042003	Lymington	SU 318019	SWA	88.9
					042004	Test	SU 354188	SWA	1040.0
					042005	Wallop Brook	SU 311330	SWA	53.6
					042006	Meon	SU 589141	SWA	72.8

Station number	River name	National Grid reference	Measuring authority	Area (sq km)	Station number	River name	National Grid reference	Measuring authority	Area (sq km)
042007	Alre	SU 574336	SWA	57.0	053008	Wellow Brook	ST 741581	WWA	72.6
042008	Chertton Stream	SU 574323	SWA	75.1	ST 955729	WWA			99.7
042009	Candover Brook	SU 568323	SWA	71.2	ST 902524	WWA			
042010	Itchen	SU 467213	SWA	360.0	ST 803399	WWA			
042011	Hamble	SU 523148	SWA	56.6	ST 681698	WWA			48.0
042012	Anton	SU 379393	SWA	185.0	ST 786671	WWA			1552.0
042013	Test	SU 355189	SWA	1040.0	ST 949866	WWA			46.8
042014	Blackwater	SU 328174	SWA	104.7	ST 937840	WWA			28.2
042016	Itchen	SU 512325	SWA	236.8	ST 738651	WWA			1605.0
042021	Branch of Test	SU 355159	SWA	1050.0	ST 891870	WWA			89.7
043001	Avon	SU 142054	WWA	1649.8	ST 914893	WWA			73.6
043003	Avon	SU 158144	WWA	1477.8	ST 757491	WWA			119.0
043004	Bourne	SU 157304	WWA	163.6	ST 667827	WWA			78.5
043005	Avon	SU 151413	WWA	323.7	ST 815688	WWA			102.0
043006	Nadder	SU 098308	WWA	220.6	054001	Severn	SO 782762	STWA	4325.0
043007	Stour	SZ 113958	WWA	1073.0	SP 040438	STWA			2210.0
043008	Wythe	SU 088343	WWA	445.4	SJ 019191	STWA			94.3
043009	Stour	ST 820147	WWA	523.1	SJ 332731	STWA			267.0
043010	Allen	SU 006085	WWA	94.0	SJ 412144	STWA			2025.0
043011	Ebble	SU 162263	WWA	109.0	SO 829768	STWA			324.0
043012	Wythe	ST 909428	WWA	112.4	SP 086536	STWA			319.0
043013	Mude	SZ 184936	WWA	12.4	SO 597686	STWA			1134.4
043014	East Avon	SU 133559	WWA	86.2	SP 208507	STWA			316.0
043015	Wythe	ST 868413	WWA	69.0	SO 868618	STWA			184.0
043017	West Avon	SU 133559	WWA	76.0	SJ 592123	STWA			852.0
043018	Allen	SU 008007	WWA	176.5	SN 944855	STWA			57.0
043019	Shreen Water	ST 807278	WWA	29.1	SO 164958	STWA			580.0
043021	Avon	SZ 155943	WWA	1706.0	SO 927463	STWA			156.0
044001	Frome	SY 866887	WWA	414.4	SJ 589141	STWA			259.0
044002	Piddle	SY 913876	WWA	183.1	SO 772734	STWA			293.0
044003	Asker	SY 470928	WWA	49.1	SJ 466092	STWA			178.0
044004	Frome	SY 708903	WWA	206.0	SP 333715	STWA			347.0
044006	Sydlng Water	SY 632987	WWA	12.4	SJ 434192	STWA			180.8
044008	Stn Winterbourne	SY 629897	WWA	19.9	SN 853872	IH			8.7
044009	Wey	SY 666839	WWA	7.0	SP 063449	STWA			95.8
045001	Eze	SS 936016	SWWA	600.9	SO 747953	STWA			258.0
045002	Eze	SS 943178	SWWA	421.7	SN 950824	STWA			52.7
045003	Culm	ST 021058	SWWA	226.1	SO 892764	STWA			34.5
045004	Axe	SY 262953	SWWA	288.5	SO 831047	STWA			198.0
045005	Otter	SY 087885	SWWA	202.5	SJ 252195	STWA			778.0
045006	Quarwe	SS 919356	SWWA	20.4	SO 735557	STWA			1480.0
045008	Otter	SY 115986	SWWA	104.2	SO 863390	STWA			6850.0
045009	Eze	SS 935260	SWWA	159.7	SO 768764	STWA			40.8
046001	South Teign	SX 671844	SWWA	9.9	SP 023408	STWA			90.7
046002	Teign	SX 856746	SWWA	380.0	SJ 252275	STWA			229.0
046003	Dart	SX 751659	SWWA	247.6	SJ 580205	STWA			167.8
046004	Avon	SX 680651	SWWA	12.0	SJ 649230	STWA			192.0
046005	East Dart	SX 657775	SWWA	21.5	SN 914867	STWA			49.0
046006	Erme	SX 642532	SWWA	43.5	SO 863399	STWA			6990.0
046007	West Dart	SX 643742	SWWA	47.9	SJ 629316	STWA			92.6
046008	Avon	SX 719476	SWWA	102.3	SJ 347303	STWA			49.1
047001	Tamar	SX 426725	SWWA	916.9	SJ 781046	STWA			54.9
047002	Tamar	SX 343886	SWWA	232.1	SJ 403223	STWA			155.0
047003	Tavy	SX 474650	SWWA	205.9	SP 273556	STWA			102.0
047004	Lynher	SX 368624	SWWA	135.5	SO 510752	STWA			164.0
047005	Ottery	SX 336866	SWWA	120.7	SO 455789	STWA			235.0
047006	Lyd	SX 388842	SWWA	218.1	SO 664724	STWA			129.0
047007	Yalim	SX 574511	SWWA	54.9	SO 393786	STWA			195.0
047008	Thrushel	SX 398856	SWWA	112.7	SO 844279	STWA			9895.0
047009	Tiddy	SX 343595	SWWA	37.2	SJ 644260	STWA			14.3
047010	Tamar	SX 290991	SWWA	76.7	SJ 654223	STWA			10.7
047011	Plym	SX 522613	SWWA	79.2	SJ 634220	STWA			25.0
047013	Withey Brook	SX 744763	SWWA	16.2	SJ 628288	STWA			5.1
047014	Walkham	SX 513699	SWWA	43.2	SJ 585241	STWA			210.0
048001	Fowey	SX 227698	SWWA	36.8	SO 861906	STWA			81.3
048002	Fowey	SX 108613	SWWA	171.2	SJ 379788	STWA			21.2
048003	Fal	SW 971447	SWWA	87.0	SJ 387297	STWA			10.4
048004	Warteggan	SX 158674	SWWA	25.3	SN 996851	STWA			187.0
048005	Kenwyn	SW 870450	SWWA	19.1	SO 913868	STWA			49.0
048006	Cober	SW 654273	SWWA	40.1	SJ 678141	STWA			16.7
048007	Kennall	SW 762377	SWWA	26.6	SO 616075	STWA			31.5
048009	St Neot	SX 184662	SWWA	22.7	SO 609115	STWA			10.4
048010	Seaton	SX 299596	SWWA	38.1	SH 999179	STWA			13.2
048011	Fowey	SX 098624	SWWA	169.1	SJ 665233	STWA			4.7
049001	Camel	SX 017682	SWWA	208.8	ST 683988	WWA			134.0
049002	Hayle	SW 549342	SWWA	48.9	SN 844876	IH			0.9
049003	De Lank	SX 137765	SWWA	21.7	SN 843878	IH			3.6
049004	Gannel	SW 829593	SWWA	41.0	SN 846873	IH			3.2
050001	Taw	SS 608237	SWWA	876.2	SO 776783	STWA			4325.0
050002	Torrige	SS 500185	SWWA	663.0	055001	Wye	SO 535090	WELS	4040.0
050003	Taw	SX 634938	SWWA	15.6	SO 485388	WELS			1895.9
050004	Hole Water	SS 705373	SWWA	5.4	SO 548405	WELS			885.8
051001	Doniford Stream	ST 088428	WWA	75.8	SN 892460	WELS			72.8
051002	Horner Water	SS 898458	WWA	20.8	SN 969676	WELS			166.8
052001	Aze	ST 527458	WWA	18.2	SN 926645	STWA			184.0
052002	Yeo	ST 556116	WWA	30.3	SO 078445	WELS			1282.1
052003	Halse Water	ST 206253	WWA	87.8	SN 829838	IH			10.4
052004	Isle	ST 361188	WWA	90.1	SO 419251	WELS			357.4
052005	Tone	ST 706250	WWA	202.0	SN 843825	WELS			27.2
052006	Yeo	ST 573162	WWA	213.1	SO 105683	WELS			111.4
052007	Parrell	ST 461144	WWA	74.8	SN 995507	WELS			244.2
052008	Tone	ST 044313	WWA	18.1	SO 328585	WELS			126.4
052009	Shepper	ST 498439	WWA	59.6	SO 364647	WELS			203.3
052010	Brue	ST 590318	WWA	135.2	SO 277294	WELS			25.1
052011	Cary	ST 498291	WWA	82.4	SO 024578	WELS			358.0
052014	Tone	ST 078202	WWA	57.2	SN 998531	WELS			29.0
052015	Land Yeo	ST 483716	WWA	23.3	SO 615428	WELS			144.0
052016	Currypool Stream	ST 271382	WWA	15.7	SO 529735	WELS			30.3
052017	Congresbury Yeo	ST 452631	WWA	66.6	SO 462598	WELS			24.2
052020	Gallica Stream	ST 571100	WWA	16.4	SO 502589	WELS			371.0
053001	Avon	ST 903641	WWA	665.6	SO 503112	WELS			142.0
053002	Sarnington Brook	ST 907605	WWA	157.7	SO 528110	WELS			4010.0
053003	Avon	ST 753645	WWA	1595.0	SO 166373	WELS			132.0
053004	Chew	ST 648647	WWA	129.5	SN 976676	WELS			174.0
053005	Midford Brook	ST 763611	WWA	147.4	SO 641257	WELS			13.2
053006	Frome(Bristol)	ST 637772	WWA	148.9	SO 667489	WELS			77.7
053007	Frome(Somerset)	ST 805564	WWA	261.6	SO 415249	WELS			354.0
053008	Avon	ST 966832	WWA	303.0	SN 910670	WELS			95.3
					SO 492415	WELS			42.3
					SN 934653	WELS			184.0
					SN 824853	IH			3.9
					SN 824842	IH			3.1
					SN 826854	IH			1.1
					056001	Usk	SO 345056	WELS	911.7
					056002	Ebbw	ST 259889	WELS	216.5
					056003	Honddu	SO 051297	WELS	62.1

Station number	River name	National Grid reference	Measuring authority	Area (sq km)	Station number	River name	National Grid reference	Measuring authority	Area (sq km)
056004	Ush	SO 127203	WELS	543.9	068018	Dane	SJ 861632	NWWA	145.0
056005	Lwyd	ST 330974	WELS	98.1	068019	Weaver	SJ 574762	NWWA	1370.0
056006	Ush	SN 947295	WELS	183.8	068020	Gowy	SJ 448711	NWWA	156.0
056007	Senni	SN 928755	WELS	19.9	069001	Mersey	SJ 728936	NWWA	679.0
056008	Monks Ditch	ST 372885	WELS	15.4	069002	Inwell	SJ 824987	NWWA	559.4
056010	Ush	SO 358042	WELS	927.2	069003	Irk	SJ 841992	NWWA	72.5
056011	Sirhowy	ST 206912	WELS	76.1	069004	Eltherow	SK 073971	NWWA	78.2
056012	Gwynne	SO 741176	WELS	82.7	069005	Glaze Brook	SJ 685939	NWWA	152.0
056013	Yscir	SO 007304	WELS	62.8	069006	Bollin	SJ 727875	NWWA	256.0
056014	Ush	SN 840290	WELS	17.0	069007	Mersey	SJ 772936	NWWA	660.0
056015	Olway Brook	SO 384010	WELS	105.1	069008	Dean	SJ 846830	NWWA	51.8
056016	Carlisle outfall	SO 104206	WELS	32.4	069011	Micker Brook	SJ 855889	NWWA	67.3
056017	Afon Lwyd	SO 274019	WELS	42.5	069015	Eltherow	SJ 962908	NWWA	156.0
056018	Sirhowy	SO 131114	WELS	13.5	069017	Goyt	SJ 964898	NWWA	183.0
057001	Taf Fechan	SO 060117	WELS	33.7	069018	Newton Brook	SJ 585933	NWWA	37.8
057002	Taf Fawr	SO 012111	WELS	43.0	069020	Medlock	SJ 849975	NWWA	57.5
057003	Taff	ST 132818	WELS	486.9	069021	Stake Brook	SD 876247	NWWA	0.3
057004	Cynon	ST 079956	WELS	106.0	069023	Roch	SO 807077	NWWA	186.0
057005	Taff	ST 079897	WELS	454.8	069024	Croal	SO 743068	NWWA	145.0
057006	Rhondda	ST 054909	WELS	100.5	069027	Tame	SJ 906918	NWWA	150.0
057007	Taff	ST 089951	WELS	184.5	069030	Sankey Brook	SJ 588922	NWWA	154.0
057008	Rhymney	ST 225821	WELS	178.7	069032	Alt	SJ 392983	NWWA	90.1
057009	Ely	ST 121770	WELS	145.0	069033	Alt	SO 359012	NWWA	100.0
057010	Ely	ST 034827	WELS	39.4	069035	Irwell	SO 787109	NWWA	155.0
057011	Blaew Taf Fawr	SN 987193	WELS	5.1	069036	Fagley Brook	SO 701149	NWWA	16.8
057012	Garwnant	SO 004129	WELS	43.1	069039	Medlock	SJ 863987	NWWA	55.9
057014	Rhymney	ST 156984	WELS	63.2	070001	Douglas	SD 631119	NWWA	39.4
057015	Taf	SO 043068	WELS	104.1	070002	Douglas	SD 476126	NWWA	198.0
057016	Taf Fechan	SO 060115	WELS	33.8	070003	Douglas	SD 587061	NWWA	55.3
058001	Ogmore	SS 904794	WELS	158.0	070004	Yarrow	SD 498180	NWWA	74.4
058002	Neath	SN 815017	WELS	190.9	070005	Lostock	SD 497197	NWWA	56.0
058003	Ewenny	SS 914780	WELS	62.9	071001	Ribble	SD 589304	NWWA	1145.0
058005	Ogmore	SS 904844	WELS	74.3	071002	Hodder	SD 719546	NWWA	37.0
058006	Mellte	SN 915082	WELS	65.8	071003	Croasdale	SD 706546	NWWA	10.4
058007	Llynfi	SS 891855	WELS	50.2	071004	Calder	SD 729360	NWWA	316.0
058008	Dulais	SN 778008	WELS	43.0	071005	Bottoms Beck	SD 745565	NWWA	10.6
058009	Ewenny	SS 920782	WELS	62.5	071006	Ribble	SD 722392	NWWA	456.0
058010	Hepste	SN 969134	WELS	11.0	071007	Ribble	SD 709379	NWWA	720.0
058011	Thaw	ST 017716	WELS	49.2	071008	Hodder	SD 704399	NWWA	261.0
059001	Tawe	SS 685998	WELS	227.7	071010	Pend-e Water	SD 837351	NWWA	108.0
059002	Loughor	SN 623127	WELS	46.4	071011	Ribble	SD 839556	NWWA	204.0
060001	Tywi	SN 491204	WELS	1087.8	071014	Darwen	SD 565278	NWWA	128.0
060002	Cothi	SN 508225	WELS	297.8	072001	Lune	SD 503647	NWWA	994.6
060003	Taf	SN 238160	WELS	217.3	072002	Wyre	SD 463411	NWWA	275.0
060004	Dawn Fawr	SN 290175	WELS	40.1	072004	Lune	SD 529653	NWWA	983.0
060005	Brian	SN 771343	WELS	66.8	072005	Lune	SD 622907	NWWA	219.0
060006	Gwili	SN 431220	WELS	129.5	072006	Lune	SD 615778	NWWA	507.1
060007	Tywi	SN 762367	WELS	231.8	072008	Wyre	SD 488447	NWWA	114.0
060009	Sawdde	SN 712266	WELS	81.1	072009	Wenning	SD 615701	NWWA	142.0
060010	Tywi	SN 485206	WELS	1090.4	072010	Lune	NY 613041	NWWA	135.8
060012	Twrch	SN 650440	WELS	20.7	072011	Rawthey	SD 639911	NWWA	200.0
060013	Cothi	SN 537301	WELS	261.6	073001	Leven	SD 371863	NWWA	241.0
061001	Western Cleddau	SM 954177	WELS	197.6	073002	Crake	SD 294882	NWWA	73.0
061002	Eastern Cleddau	SN 072153	WELS	183.1	073005	Kent	SD 509874	NWWA	209.0
061003	Gwaun	SN 005349	WELS	31.3	073007	Troutbeck	NY 404007	NWWA	23.6
061004	Western Cleddau	SM 942184	WELS	197.6	073008	Bala	SD 496806	NWWA	131.0
062001	Tarl	SN 244416	WELS	893.6	073009	Sprint	SD 514961	NWWA	34.6
062002	Tarl	SN 433406	WELS	546.5	073010	Laver	SD 367863	NWWA	247.0
063001	Ystwyth	SN 591774	WELS	169.6	073011	Mint	SD 524944	NWWA	65.8
063002	Rheidol	SN 601804	WELS	187.1	073013	Rothay	NY 371042	NWWA	64.0
063003	Wyre	SN 542698	WELS	40.6	073014	Brathay	NY 360034	NWWA	57.4
064001	Dovey	SH 745019	WELS	471.3	073015	Keer	SD 523719	NWWA	48.0
064002	Dysynni	SH 632066	WELS	75.1	074001	Duddon	SD 196896	NWWA	78.2
064003	Mawddach	SH 729233	WELS	138.6	074002	Irt	NY 136038	NWWA	44.2
064006	Leri	SN 635882	WELS	47.2	074003	Ehen	NY 084154	NWWA	44.2
065001	Glaslyn	SH 592478	WELS	68.6	074005	Ehen	NY 009061	NWWA	125.5
065002	Dwyrdd	SH 670415	WELS	78.2	074006	Calder	NY 035045	NWWA	44.8
065004	Gwyrfa	SH 484599	WELS	47.9	074007	Esk	SD 131978	NWWA	70.2
065005	Erch	SH 400404	WELS	18.1	074008	Duddon	SD 709947	NWWA	47.9
065006	Senni	SH 493623	WELS	74.4	075001	St Johns Beck	NY 309191	NWWA	40.9
065007	Dwylfawr	SH 499429	WELS	57.4	075002	Denwent	NY 038305	NWWA	663.0
066001	Chwyd	SJ 069709	WELS	404.0	075003	Denwent	NY 199321	NWWA	363.0
066002	Ehwy	SJ 021704	WELS	220.0	075004	Cocker	NY 131281	NWWA	116.6
066003	Alad	SH 957703	WELS	70.0	075005	Denwent	NY 251239	NWWA	235.0
066004	Wheeler	SJ 105714	WELS	62.9	075006	Newlands Beck	NY 240239	NWWA	33.9
066005	Chwyd	SJ 127592	WELS	95.3	075007	Glenderamackin	NY 323248	NWWA	69.0
066006	Ehwy	SH 952718	WELS	194.0	075009	Greta	NY 286242	NWWA	145.6
066008	Alad	SH 915598	WELS	11.6	075010	Marron	NY 074238	NWWA	27.7
068011	Conwy	SH 802581	WELS	344.5	075016	Cocker	NY 149214	NWWA	64.0
067001	Dee	SH 942357	WELS	261.6	076001	Haweswater Beck	NY 508159	NWWA	33.0
067002	Dee	SJ 357413	WELS	1040.0	076007	Eden	NY 470567	NWWA	1386.7
067003	Branig	SH 974539	WELS	27.0	076003	Eamont	NY 578306	NWWA	386.2
067004	Ahwen	SH 957578	WELS	25.5	076004	Lowther	NY 527287	NWWA	158.5
067005	Cernog	SJ 295373	WELS	113.7	076005	Eden	NY 605283	NWWA	618.4
067006	Ahwen	SJ 042436	WELS	184.7	076007	Eden	NY 390571	NWWA	2286.5
067007	Dee	SJ 155478	WELS	728.0	076008	Inthing	NY 486581	NWWA	334.6
067008	Alyn	SJ 336541	WELS	227.1	076009	Caldew	NY 378469	NWWA	147.2
067009	Alyn	SJ 206667	WELS	77.8	076010	Petteril	NY 412545	NWWA	160.0
067010	Gelyn	SH 843470	WELS	13.1	076011	Coal Burn	NY 693777	IR	1.5
067012	Tryweryn	SH 838398	WELS	27.2	076014	Eden	NY 773097	NWWA	69.4
067013	Hirnant	SH 946349	WELS	33.9	076015	Eamont	NY 472249	NWWA	145.0
067015	Dee	SJ 348415	WELS	1019.3	077001	Esk	NY 390718	NWWA	841.7
067016	Worthenbury Brook	SJ 418464	WELS	142.1	077002	Esk	NY 397751	SRPB	495.0
067017	Tryweryn	SH 880399	WELS	59.9	077003	Liddel Water	NY 415759	SRPB	319.0
067018	Dee	SH 874308	WELS	53.9	077004	Kirtle Water	NY 285693	SRPB	72.0
067025	Chwydog	SJ 396483	WELS	98.6	077005	Lyne	NY 412662	NWWA	191.0
067028	Cerdog	SJ 034371	WELS	36.5	078001	Annan	NY 125755	SRPB	730.3
067029	Trystion	SJ 066405	WELS	12.3	078002	Ae	NY 068852	SRPB	143.2
068001	Weaver	SJ 670633	NWWA	822.0	078003	Annan	NY 191704	SRPB	925.0
068002	Gowy	SJ 443714	NWWA	156.2	078004	Kinnel Water	NY 077868	SRPB	76.1
068003	Dane	SJ 868718	NWWA	407.1	078005	Kinnel Water	NY 091845	SRPB	229.0
068004	Wistaston Brook	SJ 674552	NWWA	92.7	079001	Afton Water	NS 631050	SRPB	8.5
068005	Weaver	SJ 653431	NWWA	207.0	079002	Nith	NX 923851	SRPB	799.0
068006	Dane	SJ 845644	NWWA	150.0	079003	Nith	NX 684129	SRPB	155.0
068007	Wincham Brook	SJ 697757	NWWA	148.0	079004	Scar Water	NX 845940	SRPB	142.0
068010	Fender	SJ 281880	NWWA	18.4	079005	Cluden Water	NX 928795	SRPB	238.0
068011	Arlay Brook	SJ 686799	NWWA	36.5	079006	Nith	NX 858994	SRPB	471.0

Station number	River name	National Grid reference	Measuring authority	Area (sq km)	Station number	River name	National Grid reference	Measuring authority	Area (sq km)
080001	Urr	NX 822610	SRPB	199.0	086001	Little Eachaig	NS 143821	CRPB	30.8
080002	Dee	NX 733641	SRPB	809.0	086002	Eachaig	NS 140843	CRPB	139.9
081001	Pemehern Burn	NX 178694	DGRW	18.2	090003	Nevis	NN 116742	HRPB	76.8
081002	Cree	NX 412653	SRPB	368.0	091002	Lochy	NN 145805	HRPB	1252.0
081003	Luce	NX 180599	SRPB	171.0	093001	Carron	NG 942429	HRPB	137.8
081004	Bladnoch	NX 387545	SRPB	334.0	094001	Ewe	NG 859803	HRPB	441.1
082001	Guvan	NX 217997	CRPB	245.5	095001	Inver	NC 147250	HRPB	137.5
082002	Doon	NS 338160	CRPB	323.8	096001	Halladale	NC 891561	HRPB	204.6
082003	Sunchar	NX 108832	CRPB	341.0	096002	Naver	NC 713568	HRPB	477.0
083002	Garnock	NS 293488	CRPB	88.8	097001	Calder Burn	ND 085596	HRCW	24.5
083003	Ayr	NS 525259	CRPB	166.3	097002	Thurso	ND 131595	HRPB	412.8
083004	Lugar	NS 508217	CRPB	181.0	101001	Eastern Yar	SZ 577857	SWA	57.5
083005	Inver	NS 345369	CRPB	380.7	101002	Medina	SZ 503874	SWA	29.8
084001	Kelvin	NS 558705	CRPB	335.1	201002	Fairy Water	IH 406758	DOEN	161.2
084002	Calder	NS 309638	SRCW	12.4	201005	Camowen	IH 460730	DOEN	274.6
084003	Chyde	NS 835452	CRPB	1092.9	201006	Drumragh	IH 458722	DOEN	324.6
084004	Chyde	NS 927424	CRPB	741.8	201007	Burn Denneil	IC 372047	DOEN	145.3
084005	Chyde	NS 704579	CRPB	1704.2	201008	Derg	IH 265842	DOEN	337.3
084006	Kelvin	NS 672749	CRPB	63.7	203010	Blackwater	IH 820519	DOEN	951.4
084007	South Calder Wtr	NS 751585	CRPB	93.0	203011	Main	ID 052086	DOEN	228.8
084008	Rotten Calder Wtr	NS 679604	CRPB	51.3	203012	Ballinderry	IH 926799	DOEN	419.5
084009	Neithan	NS 809429	CRPB	66.0	203017	Upper Bann	IJ 043509	DOEN	335.6
084011	Gryte	NS 415664	CRPB	71.0	203018	Six Mile Water	IJ 146867	DOEN	277.3
084012	White Cart Water	NS 499629	CRPB	234.9	203020	Moyola	IH 955905	DOEN	306.5
084013	Chyde	NS 677616	CRPB	1903.1	203021	Kells Water	IJ 106971	DOEN	127.0
084014	Avon Water	NS 755518	CRPB	265.5	203025	Callan	IH 893524	DOEN	164.1
084015	Kelvin	NS 638739	CRPB	235.4	203027	Braid	ID 097014	DOEN	177.2
084016	Luggie Water	NS 739725	CRPB	33.9	203028	Agavey	IC 883193	DOEN	98.9
084017	Black Cart Water	NS 411820	CRPB	103.1	203033	Upper Bann	IJ 733341	DOEN	100.9
084018	Chyde	NS 891404	CRPB	932.6	204001	Bush	IC 942362	DOEN	306.1
084019	North Calder Wtr	NS 681625	CRPB	129.8	205003	Lagan	IJ 299679	DOEN	444.7
084020	Glazert Water	NS 656763	CRPB	51.9	205004	Lagan	IJ 329693	DOEN	490.4
084021	White Cart Water	NS 587597	CRPB	91.6	205005	Ravernet	IJ 267613	DOEN	69.5
084022	Duneston	NS 929259	CRPB	110.3	205008	Lagan	IJ 236525	DOEN	85.2
084023	Bothlin Burn	NS 680717	CRPB	35.7					
084024	North Calder Wtr	NS 828678	CRPB	19.9					
084025	Luggie Water	NS 666734	CRPB	87.7					
084027	North Calder Wtr	NS 765674	CRPB	60.6					
085001	Leven	NS 394803	CRPB	784.3					
085002	Endrick Water	NS 485866	CRPB	219.9					
085003	Falloch	NN 321197	CRPB	80.3					

= closed

Refer to page 166 for key to measuring authorities

Sin. number	Gauged daily flows, monthly peaks and rainfall	Sin. number	Gauged daily flows, monthly peaks and rainfall	Sin. number	Gauged daily flows, monthly peaks and rainfall	Sin. number	Gauged daily flows, monthly peaks and rainfall	
020001	70s -----aasaa	80s aAAAs	016003	40s -----fC	50s CBAAAAA	021006	60s EAAAAA	70s AAAAAA
003001	50s ---eAAe	80s zAAAs	015004	60s AAAAAA	70s AAAAAA	021007	60s AAAAAA	70s AAAAAA
003002	70s -----aasaa	80s zAAAs		80s ABCC			80s AAAAAA	70s AAAAAA
003003	70s -----eaa	80s zAAAs		70s -----CCC	30s CCCCCBA	021008	60s AAAAAA	70s AAAAAA
003004	70s -----e	80s zAAAs		40s --	50s EEEEE	021009	60s AAAAAA	70s AAAAAA
003005	80s -----eaa			60s AAAAAA	70s EEEEE		80s AAAAAA	70s AAAAAA
004001	50s ---eAEEA	60s BABABAAAA	016006	20s -----CCC	30s CCCCCBA		60s AAAAAA	70s AAAAAA
004003	70s EEEEEAAAA	80s AAAAA		40s --	50s EEEEE	021010	60s AAAAAA	70s AAAAAA
004004	80s -----eaa	80s AAAAA	016008	60s AAAAAA	70s EEEEE	021011	60s AAAAAA	70s AAAAAA
005001	50s ---eAAAAA	60s AAE-----	015007	70s AAAAAA	80s AAAAAA	021012	60s AAAAAA	70s AAAAAA
006001	30s -----eAAAB	40s BBBABBBAA	015008	50s -----eA	60s AAAAAA	021013	60s AAAAAA	70s AAAAAA
	50s EEEEEAAAA	60s AAE-----	015010	70s AAAAAA	80s AAAAAA	021014	60s AAAAAA	70s AAAAAA
006006	70s EEEEE		015011	50s -----cc	60s CCCCCC	021015	60s AAAAAA	70s AAAAAA
006007	50s ---eAAAAA	60s BA	015012	70s CCBAAAAA	80s ACCC	021016	60s AAAAAA	70s AAAAAA
006008	70s -----e	80s AAAAA	015013	70s CCBAAAAA	80s ACCC	021017	60s AAAAAA	70s AAAAAA
007001	60s AAAAAA	70s AAAAAA	015016	70s CCBAAAAA	80s AACC	021018	60s AAAAAA	70s AAAAAA
007002	50s -----eA	60s AAAAAA	015017	70s CCBAAAAA	80s AACC	021019	60s AAAAAA	70s AAAAAA
007003	60s AAAAAA	70s AAAAAA	015018	70s CCBAAAAA	80s AACC	021020	60s AAAAAA	70s AAAAAA
007004	70s -----e	80s AAAAA	015019	70s CCBAAAAA	80s AACC	021021	60s AAAAAA	70s AAAAAA
007006	80s -----cc		015020	70s CCBAAAAA	80s AACC	021022	60s AAAAAA	70s AAAAAA
008001	30s -----fC	40s HCCCCC	016001	40s -----cc	50s CBAABBA	021023	60s AAAAAA	70s AAAAAA
008002	50s BBBAAAAA	60s AAAAAA	016002	60s AAAAAA	80s AAAAAA	021024	60s AAAAAA	70s AAAAAA
008003	70s AAAAAA	80s AAAAAA	016003	50s -----eAAAA	60s AAAAAA	021025	60s AAAAAA	70s AAAAAA
008004	50s AAAAAA	60s AAAAAA	016004	70s AAAAAA	80s AAAAAA	021026	60s AAAAAA	70s AAAAAA
008005	70s AAAAAA	80s AAAAAA	017001	60s AAAAAA	70s AAAAAA	021027	60s AAAAAA	70s AAAAAA
008006	50s AAAAAA	60s AAAAAA	017002	60s AAAAAA	70s AAAAAA	021028	60s AAAAAA	70s AAAAAA
008007	70s AAAAAA	80s AAAAAA	017003	70s AAAAAA	80s AAAAAA	021029	60s AAAAAA	70s AAAAAA
008008	50s AAAAAA	60s AAAAAA	017004	70s AAAAAA	80s AAAAAA	021030	60s AAAAAA	70s AAAAAA
008009	70s AAAAAA	80s AAAAAA	017005	70s AAAAAA	80s AAAAAA	021031	60s AAAAAA	70s AAAAAA
008010	50s AAAAAA	60s AAAAAA	018001	50s AAAAAA	80s AAAAAA	021032	60s AAAAAA	70s AAAAAA
009001	50s AAAAAA	60s AAAAAA	018002	70s AAAAAA	80s AAAAAA	021033	60s AAAAAA	70s AAAAAA
009002	70s AAAAAA	80s AAAAAA	018003	60s AAAAAA	70s AAAAAA	021034	60s AAAAAA	70s AAAAAA
009003	60s AAAAAA	70s AAAAAA	018004	70s AAAAAA	80s AAAAAA	022001	60s AAAAAA	70s AAAAAA
009004	80s AAAAAA	80s AAAAAA	018005	70s AAAAAA	80s AAAAAA	022002	60s AAAAAA	70s AAAAAA
010001	60s AAAAAA	70s AAAAAA	018006	70s AAAAAA	80s AAAAAA	022003	60s AAAAAA	70s AAAAAA
010002	60s AAAAAA	70s AAAAAA	018007	70s AAAAAA	80s AAAAAA	022004	60s AAAAAA	70s AAAAAA
010003	60s AAAAAA	70s AAAAAA	018008	70s AAAAAA	80s AAAAAA	022005	60s AAAAAA	70s AAAAAA
011001	60s AAAAAA	70s AAAAAA	018009	70s AAAAAA	80s AAAAAA	022006	60s AAAAAA	70s AAAAAA
011002	60s AAAAAA	70s AAAAAA	018010	70s AAAAAA	80s AAAAAA	022007	60s AAAAAA	70s AAAAAA
011003	60s AAAAAA	70s AAAAAA	019001	50s AAAAAA	80s AAAAAA	022008	60s AAAAAA	70s AAAAAA
012001	20s AAAAAA	30s BBBBBA	019002	60s AAAAAA	70s AAAAAA	022009	60s AAAAAA	70s AAAAAA
	40s BBBBBA	50s CCCCCC	019003	70s AAAAAA	80s AAAAAA	023001	50s AAAAAA	60s AAAAAA
	60s CCCCCC	70s CCCCCC	019004	80s AAAAAA	80s AAAAAA	023002	50s AAAAAA	60s AAAAAA
012002	70s AAAAAA	80s AAAAAA	019005	60s AAAAAA	70s AAAAAA	023003	50s AAAAAA	60s AAAAAA
012003	70s AAAAAA	80s AAAAAA	019006	60s AAAAAA	70s AAAAAA	023004	50s AAAAAA	60s AAAAAA
012004	70s AAAAAA	80s AAAAAA	019007	60s AAAAAA	70s AAAAAA	023005	50s AAAAAA	60s AAAAAA
012005	70s AAAAAA	80s AAAAAA	019008	60s AAAAAA	70s AAAAAA	023006	50s AAAAAA	60s AAAAAA
012006	70s AAAAAA	80s AAAAAA	019009	60s AAAAAA	70s AAAAAA	023007	50s AAAAAA	60s AAAAAA
012007	70s AAAAAA	80s AAAAAA	019010	60s AAAAAA	70s AAAAAA	023008	50s AAAAAA	60s AAAAAA
012008	70s AAAAAA	80s AAAAAA	019011	70s AAAAAA	80s AAAAAA	023009	50s AAAAAA	60s AAAAAA
012009	70s AAAAAA	80s AAAAAA	020001	60s AAAAAA	70s AAAAAA	023010	50s AAAAAA	60s AAAAAA
012010	70s AAAAAA	80s AAAAAA	020002	60s AAAAAA	70s AAAAAA	023011	50s AAAAAA	60s AAAAAA
012011	70s AAAAAA	80s AAAAAA	020003	60s AAAAAA	70s AAAAAA	023012	50s AAAAAA	60s AAAAAA
012012	70s AAAAAA	80s AAAAAA	020004	60s AAAAAA	70s AAAAAA	023013	50s AAAAAA	60s AAAAAA
012013	70s AAAAAA	80s AAAAAA	020005	60s AAAAAA	70s AAAAAA	023014	50s AAAAAA	60s AAAAAA
012014	70s AAAAAA	80s AAAAAA	020006	60s AAAAAA	70s AAAAAA	023015	50s AAAAAA	60s AAAAAA
012015	70s AAAAAA	80s AAAAAA	020007	60s AAAAAA	70s AAAAAA	024001	50s AAAAAA	60s AAAAAA
012016	70s AAAAAA	80s AAAAAA	020008	60s AAAAAA	70s AAAAAA	024002	50s AAAAAA	60s AAAAAA
012017	70s AAAAAA	80s AAAAAA	020009	60s AAAAAA	70s AAAAAA	024003	50s AAAAAA	60s AAAAAA
012018	70s AAAAAA	80s AAAAAA	020010	60s AAAAAA	70s AAAAAA			
012019	70s AAAAAA	80s AAAAAA	020011	60s AAAAAA	70s AAAAAA			
012020	70s AAAAAA	80s AAAAAA	020012	60s AAAAAA	70s AAAAAA			
012021	70s AAAAAA	80s AAAAAA	020013	60s AAAAAA	70s AAAAAA			
012022	70s AAAAAA	80s AAAAAA	020014	60s AAAAAA	70s AAAAAA			
012023	70s AAAAAA	80s AAAAAA	020015	60s AAAAAA	70s AAAAAA			
012024	70s AAAAAA	80s AAAAAA	020016	60s AAAAAA	70s AAAAAA			
012025	70s AAAAAA	80s AAAAAA	020017	60s AAAAAA	70s AAAAAA			
012026	70s AAAAAA	80s AAAAAA	020018	60s AAAAAA	70s AAAAAA			
012027	70s AAAAAA	80s AAAAAA	020019	60s AAAAAA	70s AAAAAA			
012028	70s AAAAAA	80s AAAAAA	020020	60s AAAAAA	70s AAAAAA			
012029	70s AAAAAA	80s AAAAAA	020021	60s AAAAAA	70s AAAAAA			
012030	70s AAAAAA	80s AAAAAA	020022	60s AAAAAA	70s AAAAAA			
012031	70s AAAAAA	80s AAAAAA	020023	60s AAAAAA	70s AAAAAA			
012032	70s AAAAAA	80s AAAAAA	020024	60s AAAAAA	70s AAAAAA			
012033	70s AAAAAA	80s AAAAAA	020025	60s AAAAAA	70s AAAAAA			
012034	70s AAAAAA	80s AAAAAA	020026	60s AAAAAA	70s AAAAAA			
012035	70s AAAAAA	80s AAAAAA	020027	60s AAAAAA	70s AAAAAA			
012036	70s AAAAAA	80s AAAAAA	020028	60s AAAAAA	70s AAAAAA			
012037	70s AAAAAA	80s AAAAAA	020029	60s AAAAAA	70s AAAAAA			
012038	70s AAAAAA	80s AAAAAA	020030	60s AAAAAA	70s AAAAAA			
012039	70s AAAAAA	80s AAAAAA	020031	60s AAAAAA	70s AAAAAA			
012040	70s AAAAAA	80s AAAAAA	020032	60s AAAAAA	70s AAAAAA			
012041	70s AAAAAA	80s AAAAAA	020033	60s AAAAAA	70s AAAAAA			
012042	70s AAAAAA	80s AAAAAA	020034	60s AAAAAA	70s AAAAAA			
012043	70s AAAAAA	80s AAAAAA	020035	60s AAAAAA	70s AAAAAA			
012044	70s AAAAAA	80s AAAAAA	020036	60s AAAAAA	70s AAAAAA			
012045	70s AAAAAA	80s AAAAAA	020037	60s AAAAAA	70s AAAAAA			
012046	70s AAAAAA	80s AAAAAA	020038	60s AAAAAA	70s AAAAAA			
012047	70s AAAAAA	80s AAAAAA	020039	60s AAAAAA	70s AAAAAA			
012048	70s AAAAAA	80s AAAAAA	020040	60s AAAAAA	70s AAAAAA			
012049	70s AAAAAA	80s AAAAAA	020041	60s AAAAAA	70s AAAAAA			
012050	70s AAAAAA	80s AAAAAA	020042	60s AAAAAA	70s AAAAAA			
012051	70s AAAAAA	80s AAAAAA	020043	60s AAAAAA	70s AAAAAA			
012052	70s AAAAAA	80s AAAAAA	020044	60s AAAAAA	70s AAAAAA			
012053	70s AAAAAA	80s AAAAAA	020045	60s AAAAAA	70s AAAAAA			
012054	70s AAAAAA	80s AAAAAA	020046	60s AAAAAA	70s AAAAAA			
012055	70s AAAAAA	80s AAAAAA	020047	60s AAAAAA	70s AAAAAA			
012056	70s AAAAAA	80s AAAAAA	020048	60s AAAAAA	70s AAAAAA			
012057	70s AAAAAA	80s AAAAAA	020049	60s AAAAAA	70s AAAAAA			
012058	70s AAAAAA	80s AAAAAA	020050	60s AAAAAA	70s AAAAAA			
012059	70s AAAAAA	80s AAAAAA	020051	60s AAAAAA	70s AAAAAA			
012060	70s AAAAAA	80s AAAAAA	020052	60s AAAAAA	70s AAAAAA			
012061	70s AAAAAA	80s AAAAAA	020053	60s AAAAAA	70s AAAAAA			
012062	70s AAAAAA	80s AAAAAA	020054	60s AAAAAA	70s AAAAAA			
012063	70s AAAAAA	80s AAAAAA	020055	60s AAAAAA	70s AAAAAA			
012064	70s AAAAAA	80s AAAAAA	020056	60s AAAAAA	70s AAAAAA			
012065	70s AAAAAA	80s AAAAAA	020057	60s AAAAAA	70s AAAAAA			
012066	70s AAAAAA	80s AAAAAA	020058	60s AAAAAA	70s AAAAAA			
012067	70s AAAAAA	80s AAAAAA	020059	60s AAAAAA	70s AAAAAA			
012068	70s AAAAAA	80s AAAAAA	020060	60s AAAAAA	70s AAAAAA			
012069	70s AAAAAA	80s AAAAAA	020061	60s AAAAAA	70s AAAAAA			
012070	70s AAAAAA	80s AAAAAA	020062	60s AAAAAA	70s AAAAAA			
012071	70s AAAAAA	80s AAAAAA	020063	60s AAAAAA	70s AAAAAA			
012072	70s AAAAAA	80s AAAAAA	020064	60s AAAAAA	70s AAAAAA			
012073	70s AAAAAA	80s AAAAAA	020065	60s AAAAAA	70s AAAAAA			
012074	70s AAAAAA	80s AAAAAA	020066	60s AAAAAA	70s AAAAAA			
012075	70s AAAAAA	80s AAAAAA	020067	60s AAAAAA	70s AAAAAA			
012076	70s AAAAAA	80s AAAAAA	020068	60s AAAAAA	70s AAAAAA			
012077	70s AAAAAA	80s AAAAAA	020069	60s AAAAAA	70s AAAAAA			
012078	70s AAAAAA	80s AAAAAA	020070	60s AAAAAA	70s AAAAAA			
012079	70s AAAAAA	80s AAAAAA	020071	60s AAAAAA	70s AAAAAA			
012080	70s AAAAAA	80s AAAAAA	020072	60s AAAAAA	70s AAAAAA			
012081	70s AAAAAA	80s AAAAAA	020073	60s AAAAAA	70s AAAAAA			
012082	70s AAAAAA	80s AAAAAA	020074	60s AAAAAA	70s AAAAAA			
012083	70s AAAAAA	80s AAAAAA	020075	60s AAAAAA	70s AAAAAA			
012084	70s AAAAAA	80s AAAAAA	020076	60s AAAAAA	70s AAAAAA			
012085	70s AAAAAA	80s AAAAAA	020077	60s AAAAAA	70s AAAAAA			
012086	70s AAAAAA	80s AAAAAA	020078	60s AAAAAA	70s AAAAAA			
012087	70s AAAAAA	80s AAAAAA	020079	60s AAAAAA	70s AAAAAA			
012088	70s AAAAAA	80s AAAAAA	020080	60s AAAAAA	70s AAAAAA			
012089	70s AAAAAA	80s AAAAAA	020081	60s AAAAAA	70s AAAAAA			
012090	70s AAAAAA	80s AAAAAA	020082	60s AAAAAA	70s AAAAAA			
012091	70s AAAAAA	80s AAAAAA	020083	60s AAAAAA	70s AAAAAA			
012092	70s AAAAAA	80s AAAAAA	020084	60s AAAAAA	70s AAAAAA			
012093	70s AAAAAA	80s AAAAAA	020085	60s AAAAAA	70s AAAAAA			
012094	70s AAAAAA	80s AAAAAA	020086	60s AAAAAA	70s AAAAAA			
012095	70s							

Stn. number	Gauged daily flows, monthly peaks and rainfall		Stn. number	Gauged daily flows, monthly peaks and rainfall		Stn. number	Gauged daily flows, monthly peaks and rainfall	
024004	50s	-----e	027032	60s	-----fEAAA	028043	60s	-----ea
024005	70s	AAAAAAAEAA	027033	80s	AEAdd	028044	80s	Cttt
024006	80s	-----eEAAA	027034	60s	AAAA	028045	60s	Cttt
024007	60s	AAAAAAAEAA	027035	80s	AAAA	028046	60s	-----fccc
024008	70s	-----fEA	027036	60s	AAAA	028047	60s	Cttt
024009	70s	AAAA	027037	80s	AAAA	028048	70s	-----f
025001	50s	-----eAAA	027038	60s	AAAA	028049	70s	-----f
025002	70s	AAAAAAAEAA	027039	80s	AAAA	028050	70s	-----f
025003	50s	-----fEA	027040	60s	AAAA	028051	70s	-----f
025004	70s	AAAAAAAEAA	027041	80s	AAAA	028052	70s	-----f
025005	50s	AAAAAAAEAA	027042	60s	AAAA	028053	70s	-----f
025006	70s	AAAAAAAEAA	027043	80s	AAAA	028054	70s	-----f
025007	60s	AAAAAAAEAA	027044	60s	AAAA	028055	70s	-----f
025008	80s	AAAAAAAEAA	027045	80s	AAAA	028056	70s	-----f
025009	60s	AAAAAAAEAA	027046	60s	AAAA	028057	70s	-----f
025010	80s	AAAAAAAEAA	027047	80s	AAAA	028058	70s	-----f
025011	60s	AAAAAAAEAA	027048	60s	AAAA	028059	70s	-----f
025012	80s	AAAAAAAEAA	027049	80s	AAAA	028060	70s	-----f
025013	60s	AAAAAAAEAA	027050	60s	AAAA	028061	70s	-----f
025014	80s	AAAAAAAEAA	027051	80s	AAAA	028062	70s	-----f
025015	60s	AAAAAAAEAA	027052	60s	AAAA	028063	70s	-----f
025016	80s	AAAAAAAEAA	027053	80s	AAAA	028064	70s	-----f
025017	60s	AAAAAAAEAA	027054	60s	AAAA	028065	70s	-----f
025018	80s	AAAAAAAEAA	027055	80s	AAAA	028066	70s	-----f
025019	60s	AAAAAAAEAA	027056	60s	AAAA	028067	70s	-----f
025020	80s	AAAAAAAEAA	027057	80s	AAAA	028068	70s	-----f
025021	60s	AAAAAAAEAA	027058	60s	AAAA	028069	70s	-----f
025022	80s	AAAAAAAEAA	027059	80s	AAAA	028070	70s	-----f
025023	60s	AAAAAAAEAA	027060	60s	AAAA	028071	70s	-----f
025024	80s	AAAAAAAEAA	027061	80s	AAAA	028072	70s	-----f
026001	50s	-----e	027062	60s	AAAA	028073	70s	-----f
026002	70s	AAAAAAAEAA	027063	80s	AAAA	028074	70s	-----f
026003	60s	AAAAAAAEAA	027064	60s	AAAA	029001	60s	AAAAAAAEAA
026004	80s	AAAAAAAEAA	027065	80s	AAAA	029002	70s	AAAAAAAEAA
026005	60s	AAAAAAAEAA	027066	60s	AAAA	029003	60s	AAAAAAAEAA
026006	80s	AAAAAAAEAA	027067	80s	AAAA	029004	70s	AAAAAAAEAA
027001	30s	-----e	027068	60s	AAAA	029005	60s	AAAAAAAEAA
027002	50s	AAAAAAAEAA	027069	80s	AAAA	029006	70s	AAAAAAAEAA
027003	70s	AAAAAAAEAA	027070	60s	AAAA	029007	60s	AAAAAAAEAA
027004	60s	AAAAAAAEAA	027071	80s	AAAA	029008	70s	AAAAAAAEAA
027005	80s	AAAAAAAEAA	027072	60s	AAAA	029009	60s	AAAAAAAEAA
027006	60s	AAAAAAAEAA	027073	80s	AAAA	030001	50s	AAAAAAAEAA
027007	80s	AAAAAAAEAA	027074	60s	AAAA	030002	70s	AAAAAAAEAA
027008	60s	AAAAAAAEAA	028001	30s	AAAA	030003	60s	AAAAAAAEAA
027009	80s	AAAAAAAEAA	028002	50s	AAAA	030004	70s	AAAAAAAEAA
027010	60s	AAAAAAAEAA	028003	70s	AAAA	030005	60s	AAAAAAAEAA
027011	80s	AAAAAAAEAA	028004	50s	AAAA	030006	70s	AAAAAAAEAA
027012	60s	AAAAAAAEAA	028005	70s	AAAA	030007	60s	AAAAAAAEAA
027013	80s	AAAAAAAEAA	028006	50s	AAAA	030008	70s	AAAAAAAEAA
027014	60s	AAAAAAAEAA	028007	70s	AAAA	030009	60s	AAAAAAAEAA
027015	80s	AAAAAAAEAA	028008	50s	AAAA	030010	70s	AAAAAAAEAA
027016	60s	AAAAAAAEAA	028009	70s	AAAA	030011	60s	AAAAAAAEAA
027017	80s	AAAAAAAEAA	028010	50s	AAAA	030012	70s	AAAAAAAEAA
027018	60s	AAAAAAAEAA	028011	70s	AAAA	030013	60s	AAAAAAAEAA
027019	80s	AAAAAAAEAA	028012	50s	AAAA	030014	70s	AAAAAAAEAA
027020	60s	AAAAAAAEAA	028013	70s	AAAA	030015	60s	AAAAAAAEAA
027021	80s	AAAAAAAEAA	028014	50s	AAAA	030016	70s	AAAAAAAEAA
027022	60s	AAAAAAAEAA	028015	70s	AAAA	030017	60s	AAAAAAAEAA
027023	80s	AAAAAAAEAA	028016	50s	AAAA	031001	30s	AAAAAAAEAA
027024	60s	AAAAAAAEAA	028017	70s	AAAA	031002	50s	AAAAAAAEAA
027025	80s	AAAAAAAEAA	028018	60s	AAAA	031003	70s	AAAAAAAEAA
027026	60s	AAAAAAAEAA	028019	80s	AAAA	031004	60s	AAAAAAAEAA
027027	80s	AAAAAAAEAA	028020	60s	AAAA	031005	70s	AAAAAAAEAA
027028	60s	AAAAAAAEAA	028021	80s	AAAA	031006	60s	AAAAAAAEAA
027029	80s	AAAAAAAEAA	028022	60s	AAAA	031007	70s	AAAAAAAEAA
027030	60s	AAAAAAAEAA	028023	80s	AAAA	031008	60s	AAAAAAAEAA
027031	80s	AAAAAAAEAA	028024	60s	AAAA	031009	70s	AAAAAAAEAA
028001	30s	AAAA	028025	80s	AAAA	031010	60s	AAAAAAAEAA
028002	50s	AAAA	028026	60s	AAAA	031011	70s	AAAAAAAEAA
028003	70s	AAAA	028027	80s	AAAA	031012	60s	AAAAAAAEAA
028004	50s	AAAA	028028	60s	AAAA	031013	70s	AAAAAAAEAA
028005	70s	AAAA	028029	80s	AAAA	031014	60s	AAAAAAAEAA
028006	50s	AAAA	028030	60s	AAAA	031015	70s	AAAAAAAEAA
028007	70s	AAAA	028031	80s	AAAA	031016	60s	AAAAAAAEAA
028008	50s	AAAA	028032	60s	AAAA	031017	70s	AAAAAAAEAA
028009	70s	AAAA	028033	80s	AAAA	031018	60s	AAAAAAAEAA
028010	50s	AAAA	028034	60s	AAAA	031019	70s	AAAAAAAEAA
028011	70s	AAAA	028035	80s	AAAA	031020	60s	AAAAAAAEAA
028012	50s	AAAA	028036	60s	AAAA	031021	70s	AAAAAAAEAA
028013	70s	AAAA	028037	80s	AAAA	031022	60s	AAAAAAAEAA
028014	50s	AAAA	028038	60s	AAAA	031023	70s	AAAAAAAEAA
028015	70s	AAAA	028039	80s	AAAA	031024	60s	AAAAAAAEAA
028016	50s	AAAA	028040	60s	AAAA	031025	70s	AAAAAAAEAA
028017	70s	AAAA	028041	80s	AAAA	031026	60s	AAAAAAAEAA
028018	50s	AAAA	028042	60s	AAAA	031027	70s	AAAAAAAEAA
028019	70s	AAAA	028043	80s	AAAA	031028	60s	AAAAAAAEAA
028020	50s	AAAA	028044	60s	AAAA	032001	40s	AAAAAAAEAA
028021	70s	AAAA	028045	80s	AAAA	032002	60s	AAAAAAAEAA
028022	50s	AAAA	028046	60s	AAAA	032003	70s	AAAAAAAEAA
028023	70s	AAAA	028047	80s	AAAA	032004	60s	AAAAAAAEAA
028024	50s	AAAA	028048	60s	AAAA	032005	70s	AAAAAAAEAA
028025	70s	AAAA	028049	80s	AAAA	032006	60s	AAAAAAAEAA
028026	50s	AAAA	028050	60s	AAAA	032007	70s	AAAAAAAEAA
028027	70s	AAAA	028051	80s	AAAA			
028028	50s	AAAA	028052	60s	AAAA			
028029	70s	AAAA	028053	80s	AAAA			
028030	50s	AAAA	028054	60s	AAAA			
028031	70s	AAAA	028055	80s	AAAA			
028032	50s	AAAA	028056	60s	AAAA			
028033	70s	AAAA	028057	80s	AAAA			
028034	50s	AAAA	028058	60s	AAAA			
028035	70s	AAAA	028059	80s	AAAA			
028036	50s	AAAA	028060	60s	AAAA			
028037	70s	AAAA	028061	80s	AAAA			
028038	50s	AAAA	028062	60s	AAAA			
028039	70s	AAAA	028063	80s	AAAA			
028040	50s	AAAA	028064	60s	AAAA			
028041	70s	AAAA	028065	80s	AAAA			
028042	50s	AAAA	028066	60s	AAAA			

Stn number	Gauged daily flows, monthly peaks and rainfall		Stn number	Gauged daily flows, monthly peaks and rainfall		Stn number	Gauged daily flows, monthly peaks and rainfall	
032008	40s --- -eAAAB 60s BBBBBAALAA 80s AAAA	50s AAAAABABAA 70s AAAAAAAAAA	034004	60s eAAAAAABAA 80s ABAA	70s AAAAAAAAAAB	037025	60s -----CBAAE 80s	70s EEEEE'---
032012	60s --- -f 80s EEE	70s EEEEEEEEF	034005	60s -eAAAAAABAA 80s ABAA	70s AAAAAAAAAAB	037026	60s -ebababaa 80s	70s aababab
032015	60s -----f 80s EEE	70s EEEEEEEEF	034006	60s --- eAAABAA 80s AAAA	70s AAAAAAAAAAA	037027	60s --- 80s	70s ---
032016	70s -eEEEEEEEF 80s EEEe	80s EEEe	034007	60s --- -eAAB 80s AAAA	70s AAAAAAAAAAA	037028	60s --- 80s	70s ---
032018	70s -EEEEEEEF 80s EEE	80s EEE	034008	60s --- -eaba 80s ECDa	70s aabababab	037029	60s --- 80s	70s ---
032019	70s EEEEEE 80s EEE	80s EEE	034010	60s --- -e 80s ABAA	70s aAAAAAAAA	037030	60s --- 80s	70s ---
032020	70s EAAAAAABAB 80s ABABe	80s ABABe	034011	60s --- -eAAA 80s ABAA	70s AFAA[AABRF	037031	60s --- 80s	70s ---
032023	70s EEEEEEEEF 80s EEE	80s EEE	034012	60s --- -eAAA 80s AAAA	70s AAAAAAAAAAA	037032	60s --- 80s	70s ---
032024	70s EEEEEEEEF 80s EEE	80s EEE	034013	70s --- -eAAB 80s ABA	90s ---	037033	70s --- 80s	70s ---
032025	70s EEEEEEEEF 80s EEE	80s EEE	034014	60s --- -e 80s ABA	90s ---	037034	70s --- 80s	70s ---
032026	70s EEEEEEEEF 80s EEE	80s EEE	034018	70s --- -eAAA 80s ABA	90s ---	037035	70s --- 80s	70s ---
032027	70s EEEEEEEEF 80s EEE	80s EEE	034019	70s --- -eAAA 80s ABA	90s ---	037036	70s --- 80s	70s ---
032029	70s EEEEEEEEF 80s EEE	80s EEE	035001	60s --- -eEEEF 80s bel e	70s --- -e	037037	70s --- 80s	70s ---
032030	70s EEEEEEEEF 80s EEE	80s EEE	035002	60s --- -eAAA 80s ABAA	70s AABDAFAAB	037038	70s --- 80s	70s ---
032031	80s --- -e 90s EEE		035003	60s --- -eAAA 80s ABAA	70s ABA 80s ---	037039	70s --- 80s	70s ---
033001	30s --- -eCC 50s ECCCCCCCCC 70s ECCCCCCCCC	40s ECCCCCCCCC 60s ECCCCCCCCC	035004	60s --- -eAAA 80s ABAA	70s ABA 80s ---	038001	30s --- 50s ECCCCCCCCC 60s ECCCCCCCCC	40s ECCCCCCCCC 60s ECCCCCCCCC
033002	30s --- -eCC 50s ECCCCCCCCC 70s ECCCCCCCCC	40s ECCCCCCCCC 60s ECCCCCCCCC	035008	60s --- -eAAA 80s ABAA	70s ABA 80s ---	038002	80s --- 90s ECCCCCCCCC	80s ECCCCCCCCC
033003	30s --- -eCC 50s ECCCCCCCCC 70s ECCCCCCCCC	40s ECCCCCCCCC 60s ECCCCCCCCC	035009	70s --- -e 80s ABAA	90s ---	038003	50s --- 60s ECCCCCCCCC	60s ECCCCCCCCC
033004	30s --- -eCC 50s ECCCCCCCCC 70s ECCCCCCCCC	40s ECCCCCCCCC 60s ECCCCCCCCC	035010	60s --- -e 80s ABAA	70s ABA 80s ---	038004	70s --- 80s ECCCCCCCCC	80s ECCCCCCCCC
033005	50s --- -eCC 60s ECCCCCCCCC 70s ECCCCCCCCC	60s ECCCCCCCCC 80s ECCCCCCCCC	035011	80s --- -e 90s ABAA	100s ---	038005	60s --- 70s ECCCCCCCCC	70s ECCCCCCCCC
033006	50s --- -eCC 60s ECCCCCCCCC 70s ECCCCCCCCC	60s ECCCCCCCCC 80s ECCCCCCCCC	035012	70s --- -e 80s ABAA	90s ---	038006	50s --- 60s ECCCCCCCCC	60s ECCCCCCCCC
033007	50s --- -eCC 60s ECCCCCCCCC 70s ECCCCCCCCC	60s ECCCCCCCCC 80s ECCCCCCCCC	035013	60s --- -e 80s ABAA	70s ABA 80s ---	038007	60s --- 70s ECCCCCCCCC	70s ECCCCCCCCC
033008	50s --- -eCC 60s ECCCCCCCCC 70s ECCCCCCCCC	60s ECCCCCCCCC 80s ECCCCCCCCC	036001	20s --- -eCC 40s ECCCCCCCCC 60s ECCCCCCCCC	30s ECCCCCCCCC 50s ECCCCCCCCC	038008	70s --- 80s ECCCCCCCCC	80s ECCCCCCCCC
033009	50s --- -eCC 60s ECCCCCCCCC 70s ECCCCCCCCC	60s ECCCCCCCCC 80s ECCCCCCCCC	036002	60s --- -eCC 80s ABAA	70s ABA 80s ---	038009	80s --- 90s ECCCCCCCCC	90s ECCCCCCCCC
033011	60s --- -eCC 80s ABAA	90s ABAA	036003	60s --- -eCC 80s ABAA	70s ABA 80s ---	038010	90s --- 100s ECCCCCCCCC	100s ECCCCCCCCC
033012	60s --- -eCC 80s ABAA	90s ABAA	036004	60s --- -eCC 80s ABAA	70s ABA 80s ---	038011	100s --- 110s ECCCCCCCCC	110s ECCCCCCCCC
033013	60s --- -eCC 80s ABAA	90s ABAA	036005	60s --- -eCC 80s ABAA	70s ABA 80s ---	038012	110s --- 120s ECCCCCCCCC	120s ECCCCCCCCC
033014	60s --- -eCC 80s ABAA	90s ABAA	036006	60s --- -eCC 80s ABAA	70s ABA 80s ---	038013	120s --- 130s ECCCCCCCCC	130s ECCCCCCCCC
033015	60s --- -eCC 80s ABAA	90s ABAA	036007	60s --- -eCC 80s ABAA	70s ABA 80s ---	038014	130s --- 140s ECCCCCCCCC	140s ECCCCCCCCC
033016	60s --- -eCC 80s ABAA	90s ABAA	036008	60s --- -eCC 80s ABAA	70s ABA 80s ---	038015	140s --- 150s ECCCCCCCCC	150s ECCCCCCCCC
033017	70s --- -eCC 80s ABAA	90s ABAA	036009	60s --- -eCC 80s ABAA	70s ABA 80s ---	038016	150s --- 160s ECCCCCCCCC	160s ECCCCCCCCC
033018	70s --- -eCC 80s ABAA	90s ABAA	036010	60s --- -eCC 80s ABAA	70s ABA 80s ---	038017	160s --- 170s ECCCCCCCCC	170s ECCCCCCCCC
033019	80s --- -eCC 90s ABAA	100s ABAA	036011	60s --- -eCC 80s ABAA	70s ABA 80s ---	038018	170s --- 180s ECCCCCCCCC	180s ECCCCCCCCC
033020	80s --- -eCC 90s ABAA	100s ABAA	036012	60s --- -eCC 80s ABAA	70s ABA 80s ---	038019	180s --- 190s ECCCCCCCCC	190s ECCCCCCCCC
033021	80s --- -eCC 90s ABAA	100s ABAA	036013	70s --- -eCC 80s ABAA	90s ABAA	038020	190s --- 200s ECCCCCCCCC	200s ECCCCCCCCC
033022	80s --- -eCC 90s ABAA	100s ABAA	036014	70s --- -eCC 80s ABAA	90s ABAA	038021	200s --- 210s ECCCCCCCCC	210s ECCCCCCCCC
033023	80s --- -eCC 90s ABAA	100s ABAA	036015	70s --- -eCC 80s ABAA	90s ABAA	038022	210s --- 220s ECCCCCCCCC	220s ECCCCCCCCC
033024	80s --- -eCC 90s ABAA	100s ABAA	036016	70s --- -eCC 80s ABAA	90s ABAA	038023	220s --- 230s ECCCCCCCCC	230s ECCCCCCCCC
033025	80s --- -eCC 90s ABAA	100s ABAA	036017	70s --- -eCC 80s ABAA	90s ABAA	038024	230s --- 240s ECCCCCCCCC	240s ECCCCCCCCC
033026	80s --- -eCC 90s ABAA	100s ABAA	036018	70s --- -eCC 80s ABAA	90s ABAA	038025	240s --- 250s ECCCCCCCCC	250s ECCCCCCCCC
033027	80s --- -eCC 90s ABAA	100s ABAA	036019	70s --- -eCC 80s ABAA	90s ABAA	038026	250s --- 260s ECCCCCCCCC	260s ECCCCCCCCC
033028	80s --- -eCC 90s ABAA	100s ABAA	036020	70s --- -eCC 80s ABAA	90s ABAA	038027	260s --- 270s ECCCCCCCCC	270s ECCCCCCCCC
033029	80s --- -eCC 90s ABAA	100s ABAA	036021	70s --- -eCC 80s ABAA	90s ABAA	038028	270s --- 280s ECCCCCCCCC	280s ECCCCCCCCC
033030	80s --- -eCC 90s ABAA	100s ABAA	036022	70s --- -eCC 80s ABAA	90s ABAA	038029	280s --- 290s ECCCCCCCCC	290s ECCCCCCCCC
033031	80s --- -eCC 90s ABAA	100s ABAA	036023	70s --- -eCC 80s ABAA	90s ABAA	038030	290s --- 300s ECCCCCCCCC	300s ECCCCCCCCC
033032	80s --- -eCC 90s ABAA	100s ABAA	036024	70s --- -eCC 80s ABAA	90s ABAA	038031	300s --- 310s ECCCCCCCCC	310s ECCCCCCCCC
033033	80s --- -eCC 90s ABAA	100s ABAA	036025	70s --- -eCC 80s ABAA	90s ABAA	038032	310s --- 320s ECCCCCCCCC	320s ECCCCCCCCC
033034	80s --- -eCC 90s ABAA	100s ABAA	036026	70s --- -eCC 80s ABAA	90s ABAA	038033	320s --- 330s ECCCCCCCCC	330s ECCCCCCCCC
033035	80s --- -eCC 90s ABAA	100s ABAA	036027	70s --- -eCC 80s ABAA	90s ABAA	038034	330s --- 340s ECCCCCCCCC	340s ECCCCCCCCC
033036	80s --- -eCC 90s ABAA	100s ABAA	036028	70s --- -eCC 80s ABAA	90s ABAA	038035	340s --- 350s ECCCCCCCCC	350s ECCCCCCCCC
033037	80s --- -eCC 90s ABAA	100s ABAA	036029	70s --- -eCC 80s ABAA	90s ABAA	038036	350s --- 360s ECCCCCCCCC	360s ECCCCCCCCC
033038	80s --- -eCC 90s ABAA	100s ABAA	036030	70s --- -eCC 80s ABAA	90s ABAA	038037	360s --- 370s ECCCCCCCCC	370s ECCCCCCCCC
033039	80s --- -eCC 90s ABAA	100s ABAA	036031	70s --- -eCC 80s ABAA	90s ABAA	038038	370s --- 380s ECCCCCCCCC	380s ECCCCCCCCC
033040	80s --- -eCC 90s ABAA	100s ABAA	036032	70s --- -eCC 80s ABAA	90s ABAA	038039	380s --- 390s ECCCCCCCCC	390s ECCCCCCCCC
033041	80s --- -eCC 90s ABAA	100s ABAA	036033	70s --- -eCC 80s ABAA	90s ABAA	038040	390s --- 400s ECCCCCCCCC	400s ECCCCCCCCC
033042	80s --- -eCC 90s ABAA	100s ABAA	036034	70s --- -eCC 80s ABAA	90s ABAA	038041	400s --- 410s ECCCCCCCCC	410s ECCCCCCCCC
033043	80s --- -eCC 90s ABAA	100s ABAA	036035	70s --- -eCC 80s ABAA	90s ABAA	038042	410s --- 420s ECCCCCCCCC	420s ECCCCCCCCC
033044	80s --- -eCC 90s ABAA	100s ABAA	036036	70s --- -eCC 80s ABAA	90s ABAA	038043	420s --- 430s ECCCCCCCCC	430s ECCCCCCCCC
033045	80s --- -eCC 90s ABAA	100s ABAA	036037	70s --- -eCC 80s ABAA	90s ABAA	038044	430s --- 440s ECCCCCCCCC	440s ECCCCCCCCC
033046	80s --- -eCC 90s ABAA	100s ABAA	036038	70s --- -eCC 80s ABAA	90s ABAA	038045	440s --- 450s ECCCCCCCCC	450s ECCCCCCCCC
033047	80s --- -eCC 90s ABAA	100s ABAA	036039	70s --- -eCC 80s ABAA	90s ABAA	038046	450s --- 460s ECCCCCCCCC	460s ECCCCCCCCC
033048	80s --- -eCC 90s ABAA	100s ABAA	036040	70s --- -eCC 80s ABAA	90s ABAA	038047	460s --- 470s ECCCCCCCCC	470s ECCCCCCCCC
033049	80s --- -eCC 90s ABAA	100s ABAA	036041	70s --- -eCC 80s ABAA	90s ABAA	038048	470s --- 480s ECCCCCCCCC	480s ECCCCCCCCC
033050	80s --- -eCC 90s ABAA	100s ABAA	036042	70s --- -eCC 80s ABAA	90s ABAA	038049	480s --- 490s ECCCCCCCCC	490s ECCCCCCCCC
033051	80s --- -eCC 90s ABAA	100s ABAA	036043	70s --- -eCC 80s ABAA	90s ABAA	038050	490s --- 500s ECCCCCCCCC	500s ECCCCCCCCC
033052	80s --- -eCC 90s ABAA	100s ABAA	036044	70s --- -eCC 80s ABAA	90s ABAA	038051	500s --- 510s ECCCCCCCCC	510s ECCCCCCCCC
033053	80s --- -eCC 90s ABAA	100s ABAA	036045	70s --- -eCC 80s ABAA	90s ABAA	038052	510s --- 520s ECCCCCCCCC	520s ECCCCCCCCC
033054	80s --- -eCC 90s ABAA	100s ABAA	036046	70s --- -eCC 80s ABAA	90s ABAA	038053	520s --- 530s ECCCCCCCCC	530s ECCCCCCCCC
033055	80s --- -eCC 90s ABAA	100s ABAA	036047	70s --- -eCC 80s ABAA	90s ABAA	038054	530s --- 540s ECCCCCCCCC	540s ECCCCCCCCC
033056	80s --- -eCC 90s ABAA	100s ABAA	036048	70s --- -eCC 80s ABAA	90s ABAA	038055	540s --- 550s ECCCCCCCCC	550s ECCCCCCCCC
033057	80s --- -eCC 90s ABAA	100s ABAA	036049	70s --- -eCC 80s ABAA	90s ABAA	038056	550s --- 560s ECCCCCCCCC	560s ECCCCCCCCC
033058	80s --- -eCC 90s ABAA	100s ABAA	036050	70s --- -eCC 80s ABAA	90s ABAA	038057	560s --- 570s ECCCCCCCCC	570s ECCCCCCCCC
033059	80s --- -eCC 90s ABAA	100s ABAA	036051	70s --- -eCC 80s ABAA	90s ABAA	038058	570s --- 580s ECCCCCCCCC	580s ECCCCCCCCC
033060	80s --- -eCC 90s ABAA	100s ABAA	036052	70s --- -eCC 80s ABAA	90s ABAA	038059	580s --- 590s ECCCCCCCCC	590s ECCCCCCCCC
033061	80s --- -eCC 90s ABAA	100s ABAA	036053	70s --- -eCC 80s ABAA	90s ABAA	038060	590s --- 600s ECCCCCCCCC	600s ECCCCCCCCC
033062	80s --- -eCC 90s ABAA	100s ABAA	036054	70s --- -eCC 80s ABAA	90s ABAA	038061	600s --- 610s ECCCCCCCCC	610s ECCCCCCCCC
033063	80s --- -eCC 90s ABAA	100s ABAA	036055	70s --- -eCC 80s ABAA	90s ABAA	038062	610s --- 620s ECCCCCCCCC	620s ECCCCCCCCC
033064	80s --- -eCC 90s ABAA	100s ABAA	036056	70s --- -eCC 80s ABAA	90s ABAA	038063	620s --- 630s ECCCCCCCCC	630s ECCCCCCCCC
033065	80s --- -eCC 90s ABAA	100s ABAA	036057	70s --- -eCC 80s ABAA	90s ABAA	038064	630s --- 640s ECCCCCCCCC	640s ECCCCCCCCC
033066	80s --- -eCC 90s ABAA	100s ABAA	036058	70s --- -eCC 80s ABAA	90s ABAA	038065	640s --- 650s ECCCCCCCCC	650s ECCCCCCCCC
033067	80s --- -eCC 90s ABAA	100s ABAA	036059	70s --- -eCC 80s ABAA	90s ABAA	038066	650s --- 660s ECCCCCCCCC	660s ECCCCCCCCC
033068	80s --- -eCC 90s ABAA	100s ABAA	036060	70s --- -eCC 80s ABAA	90s ABAA	038067	660s --- 670s ECCCCCCCCC	670s ECCCCCCCCC
034001	50s --- -e 60s ABA 70s ---		037001	50s --- -e 60s ABA 70s ---		039001	80s --- -e 90s ABA 100s ---	90s ABA 100s ---
034002	50s --- -e 60s ABA 70s ---		037002	50s --- -e 60s ABA 70s ---		039002	80s --- -e 90s ABA 100s ---	90s ABA 100s ---
034003	50s --- -e 60s ABA 70s ---		037003	50s --- -e 60s ABA 70s ---		039003	80s --- -e 90s ABA 100s ---	90s ABA 100s ---

Stn. number	Gauged daily flows, monthly peaks and rainfall		Stn. number	Gauged daily flows, monthly peaks and rainfall		Stn. number	Gauged daily flows, monthly peaks and rainfall	
039028	60s -----EA	70s AAAAAAAAAA	041015	60s -----EAA	70s AAADDAADD	047001	50s -----AAA	60s AAAAAEEEE
039029	60s -----fEA	70s AAAAAA	041016	30s -----f	40s cccccccccc	047002	50s -----eaa	60s AAAAA
039030	60s fAAAAA	80s AAAAA	041017	60s -----e	70s aBAAABAA	047003	50s -----e	60s -----f
039031	60s AAE	70s AAAAA	041018	60s AAAAA	80s AADe	047004	50s -----e	60s f
039032	60s AAE	70s AAAAA	041019	60s AAAAA	80s AAAAA	047005	50s -----e	60s AAAAA
039033	60s AAAAA	70s AAAAA	041020	60s AADe	70s aBAAABAA	047006	60s AF	70s AAAAA
039034	60s AAAAA	80s AAAAA	041021	60s AAAAA	80s AAAAA	047007	60s AF	70s AAAAA
039035	60s AAAAA	70s AAAAA	041022	60s AAAAA	80s AAAAA	047008	60s AAAAA	70s AAAAA
039036	60s AAAAA	70s AAAAA	041023	60s AAAAA	80s AAAAA	047009	60s AAAAA	70s AAAAA
039037	60s fAAAAA	80s AAAAA	041024	60s AAAAA	80s AAAAA	047010	60s AAAAA	80s AAAAA
039038	60s AAAAA	70s AAAAA	041025	60s AAAAA	80s AAAAA	047011	60s AAAAA	80s AAAAA
039040	60s fAAAAA	80s AAAAA	041026	60s AAAAA	80s AAAAA	047012	60s AAAAA	80s AAAAA
039042	60s fAAAAA	80s AAAAA	041027	60s AAAAA	80s AAAAA	047013	60s AAAAA	80s AAAAA
039043	60s fAAAAA	70s AAAAA	041028	60s AAAAA	80s AAAAA	047014	60s AAAAA	80s AAAAA
039044	60s fAAAAA	80s AAAAA	042001	50s AAAAA	60s AAAAA	048001	50s AAAAA	60s AAAAA
039046	60s fAAAAA	80s AAAAA	042002	50s AAAAA	60s AAAAA	048002	50s AAAAA	60s AAAAA
039049	60s fAAAAA	80s AAAAA	042003	50s AAAAA	60s AAAAA	048003	50s AAAAA	60s AAAAA
039051	60s fAAAAA	80s AAAAA	042004	50s AAAAA	60s AAAAA	048004	50s AAAAA	60s AAAAA
039052	60s fAAAAA	80s AAAAA	042005	50s AAAAA	60s AAAAA	048005	50s AAAAA	60s AAAAA
039053	60s fAAAAA	80s AAAAA	042006	50s AAAAA	60s AAAAA	048006	50s AAAAA	60s AAAAA
039054	60s fAAAAA	70s AAAAA	042007	50s AAAAA	60s AAAAA	048007	50s AAAAA	60s AAAAA
039055	60s fAAAAA	80s AAAAA	042008	50s AAAAA	60s AAAAA	048008	50s AAAAA	60s AAAAA
039056	60s fAAAAA	80s AAAAA	042009	50s AAAAA	60s AAAAA	048009	50s AAAAA	60s AAAAA
039057	60s fAAAAA	80s AAAAA	042010	50s AAAAA	60s AAAAA	048010	50s AAAAA	60s AAAAA
039058	60s fAAAAA	80s AAAAA	042011	50s AAAAA	60s AAAAA	048011	50s AAAAA	60s AAAAA
039059	60s fAAAAA	80s AAAAA	042012	50s AAAAA	60s AAAAA	049001	50s AAAAA	60s AAAAA
039060	60s fAAAAA	80s AAAAA	042013	50s AAAAA	60s AAAAA	049002	50s AAAAA	60s AAAAA
039061	60s fAAAAA	80s AAAAA	042014	50s AAAAA	60s AAAAA	049003	50s AAAAA	60s AAAAA
039062	60s fAAAAA	80s AAAAA	042015	50s AAAAA	60s AAAAA	049004	50s AAAAA	60s AAAAA
039063	60s fAAAAA	80s AAAAA	042016	50s AAAAA	60s AAAAA	050001	50s AAAAA	60s AAAAA
039064	60s fAAAAA	80s AAAAA	042017	50s AAAAA	60s AAAAA	050002	50s AAAAA	60s AAAAA
039065	60s fAAAAA	80s AAAAA	042018	50s AAAAA	60s AAAAA	050003	50s AAAAA	60s AAAAA
039066	60s fAAAAA	80s AAAAA	042019	50s AAAAA	60s AAAAA	050004	50s AAAAA	60s AAAAA
039067	60s fAAAAA	80s AAAAA	043001	50s AAAAA	60s AAAAA	051001	50s AAAAA	60s AAAAA
039068	60s fAAAAA	80s AAAAA	043002	50s AAAAA	60s AAAAA	051002	50s AAAAA	60s AAAAA
039069	60s fAAAAA	80s AAAAA	043003	50s AAAAA	60s AAAAA	052001	50s AAAAA	60s AAAAA
039070	60s fAAAAA	80s AAAAA	043004	50s AAAAA	60s AAAAA	052002	50s AAAAA	60s AAAAA
039071	60s fAAAAA	80s AAAAA	043005	50s AAAAA	60s AAAAA	052003	50s AAAAA	60s AAAAA
039072	60s fAAAAA	80s AAAAA	043006	50s AAAAA	60s AAAAA	052004	50s AAAAA	60s AAAAA
039073	60s fAAAAA	80s AAAAA	043007	50s AAAAA	60s AAAAA	052005	50s AAAAA	60s AAAAA
039074	60s fAAAAA	80s AAAAA	043008	50s AAAAA	60s AAAAA	052006	50s AAAAA	60s AAAAA
039075	60s fAAAAA	80s AAAAA	043009	50s AAAAA	60s AAAAA	052007	50s AAAAA	60s AAAAA
039076	60s fAAAAA	80s AAAAA	043010	50s AAAAA	60s AAAAA	052008	50s AAAAA	60s AAAAA
039077	60s fAAAAA	80s AAAAA	043011	50s AAAAA	60s AAAAA	052009	50s AAAAA	60s AAAAA
039078	60s fAAAAA	80s AAAAA	043012	50s AAAAA	60s AAAAA	052010	50s AAAAA	60s AAAAA
039079	60s fAAAAA	80s AAAAA	043013	50s AAAAA	60s AAAAA	052011	50s AAAAA	60s AAAAA
039080	60s fAAAAA	80s AAAAA	043014	50s AAAAA	60s AAAAA	052012	50s AAAAA	60s AAAAA
039081	60s fAAAAA	80s AAAAA	043015	50s AAAAA	60s AAAAA	052013	50s AAAAA	60s AAAAA
039082	60s fAAAAA	80s AAAAA	043016	50s AAAAA	60s AAAAA	052014	50s AAAAA	60s AAAAA
039083	60s fAAAAA	80s AAAAA	043017	50s AAAAA	60s AAAAA	052015	50s AAAAA	60s AAAAA
039084	60s fAAAAA	80s AAAAA	043018	50s AAAAA	60s AAAAA	052016	50s AAAAA	60s AAAAA
039085	60s fAAAAA	80s AAAAA	043019	50s AAAAA	60s AAAAA	052017	50s AAAAA	60s AAAAA
039086	60s fAAAAA	80s AAAAA	043020	50s AAAAA	60s AAAAA	052018	50s AAAAA	60s AAAAA
039087	60s fAAAAA	80s AAAAA	043021	50s AAAAA	60s AAAAA	052019	50s AAAAA	60s AAAAA
039088	60s fAAAAA	80s AAAAA	043022	50s AAAAA	60s AAAAA	052020	50s AAAAA	60s AAAAA
040001	50s fAAAAA	60s AAAAA	043023	50s AAAAA	60s AAAAA	053001	50s AAAAA	60s AAAAA
040002	50s fAAAAA	60s AAAAA	043024	50s AAAAA	60s AAAAA	053002	50s AAAAA	60s AAAAA
040003	50s fAAAAA	60s AAAAA	043025	50s AAAAA	60s AAAAA	053003	50s AAAAA	60s AAAAA
040004	50s fAAAAA	60s AAAAA	043026	50s AAAAA	60s AAAAA	053004	50s AAAAA	60s AAAAA
040005	50s fAAAAA	60s AAAAA	043027	50s AAAAA	60s AAAAA	053005	50s AAAAA	60s AAAAA
040006	50s fAAAAA	60s AAAAA	043028	50s AAAAA	60s AAAAA	053006	50s AAAAA	60s AAAAA
040007	50s fAAAAA	60s AAAAA	043029	50s AAAAA	60s AAAAA	053007	50s AAAAA	60s AAAAA
040008	50s fAAAAA	60s AAAAA	043030	50s AAAAA	60s AAAAA	053008	50s AAAAA	60s AAAAA
040009	50s fAAAAA	60s AAAAA	043031	50s AAAAA	60s AAAAA	053009	50s AAAAA	60s AAAAA
040010	50s fAAAAA	60s AAAAA	043032	50s AAAAA	60s AAAAA	053010	50s AAAAA	60s AAAAA
040011	50s fAAAAA	60s AAAAA	043033	50s AAAAA	60s AAAAA	053011	50s AAAAA	60s AAAAA
040012	50s fAAAAA	60s AAAAA	043034	50s AAAAA	60s AAAAA	053012	50s AAAAA	60s AAAAA
040013	50s fAAAAA	60s AAAAA	043035	50s AAAAA	60s AAAAA	053013	50s AAAAA	60s AAAAA
040014	50s fAAAAA	60s AAAAA	043036	50s AAAAA	60s AAAAA	053014	50s AAAAA	60s AAAAA
040015	50s fAAAAA	60s AAAAA	043037	50s AAAAA	60s AAAAA	053015	50s AAAAA	60s AAAAA
040016	50s fAAAAA	60s AAAAA	043038	50s AAAAA	60s AAAAA	053016	50s AAAAA	60s AAAAA
040017	50s fAAAAA	60s AAAAA	043039	50s AAAAA	60s AAAAA	053017	50s AAAAA	60s AAAAA
040018	50s fAAAAA	60s AAAAA	043040	50s AAAAA	60s AAAAA	053018	50s AAAAA	60s AAAAA
040019	50s fAAAAA	60s AAAAA	043041	50s AAAAA	60s AAAAA	053019	50s AAAAA	60s AAAAA
040020	50s fAAAAA	60s AAAAA	043042	50s AAAAA	60s AAAAA	053020	50s AAAAA	60s AAAAA
040021	50s fAAAAA	60s AAAAA	043043	50s AAAAA	60s AAAAA	053021	50s AAAAA	60s AAAAA
040022	50s fAAAAA	60s AAAAA	043044	50s AAAAA	60s AAAAA	053022	50s AAAAA	60s AAAAA
040023	50s fAAAAA	60s AAAAA	043045	50s AAAAA	60s AAAAA	053023	50s AAAAA	60s AAAAA
040024	50s fAAAAA	60s AAAAA	043046	50s AAAAA	60s AAAAA	053024	50s AAAAA	60s AAAAA
041001	50s fAAAAA	60s AAAAA	043047	50s AAAAA	60s AAAAA	053025	50s AAAAA	60s AAAAA
041002	50s fAAAAA	60s AAAAA	043048	50s AAAAA	60s AAAAA	053026	50s AAAAA	60s AAAAA
041003	50s fAAAAA	60s AAAAA	043049	50s AAAAA	60s AAAAA	053027	50s AAAAA	60s AAAAA
041004	50s fAAAAA	60s AAAAA	043050	50s AAAAA	60s AAAAA	053028	50s AAAAA	60s AAAAA
041005	50s fAAAAA	60s AAAAA	043051	50s AAAAA	60s AAAAA	053029	50s AAAAA	60s AAAAA
041006	50s fAAAAA	60s AAAAA	043052	50s AAAAA	60s AAAAA	053030	50s AAAAA	60s AAAAA
041007	50s fAAAAA	60s AAAAA	043053	50s AAAAA	60s AAAAA	053031	50s AAAAA	60s AAAAA
041008	50s fAAAAA	60s AAAAA	043054	50s AAAAA	60s AAAAA	053032	50s AAAAA	60s AAAAA
041009	50s fAAAAA	60s AAAAA	043055	50s AAAAA	60s AAAAA	053033	50s AAAAA	60s AAAAA
041010	50s fAAAAA	60s AAAAA	043056	50s AAAAA	60s AAAAA	053034	50s AAAAA	60s AAAAA
041011	50s fAAAAA	60s AAAAA	043057	50s AAAAA	60s AAAAA	053035	50s AAAAA	60s AAAAA
041012	50s fAAAAA	60s AAAAA	043058	50s AAAAA	60s AAAAA	053036	50s AAAAA	60s AAAAA
041013	50s fAAAAA	60s AAAAA	043059	50s AAAAA	60s AAAAA	053037	50s AAAAA	60s AAAAA
041014	50s fAAAAA	60s AAAAA	043060	50s AAAAA	60s AAAAA	053038	50s AAAAA	60s AAAAA

Stn number	Gauged daily flows, monthly peaks and rainfall		Stn number	Gauged daily flows, monthly peaks and rainfall		Stn number	Gauged daily flows, monthly peaks and rainfall			
053023	70s	-----eaa	80s	AAAAaa		055005	30s	-----eBA		
053024	70s	-----aa	80s	AAAAaa		40s	AAAAAAAA	80s	AAAAAaaaa	
053025	80s	AAAAaa				10s	cccccccc			
053026	70s	-----aa	80s	AAAAaa		30s	cccccccc			
053028	80s	-----aa				40s	AAAAAAAA			
054001	20s	-fcccccccc	30s	cccccccc		60s	AAAAAABCC			
	40s	cccccccc	50s	cccccccc		70s	AAAAAABCC			
	60s	cccccccc	70s	CCAAAAABCAA						
054002	80s	AAAAf				055007	30s	-----eAA	40s	AAAAAAAA
	30s	-fBA	40s	AAAAAABBC		50s	AAAAAAAA			
	50s	CCCCBAaaaa	60s	AAAAAABAA		60s	AAAAAABAA			
	70s	BCBABABACC	70s	CAAF		70s	AAAAAABAA			
054003	20s	cccccc'cc	30s	ccccccba		055008	40s	-----eAA	50s	AAAAAABAA
	40s	AAAAAABAA	50s	AAAAAABAA		60s	AAAAAABAA			
	60s	AABBBAAAA	70s	BCCCCCC		70s	AAAAAABAA			
054004	80s	CCCC				055009	40s	-----eA	50s	AAAAAABAA
	50s	-fCBAAAA	60s	AAAAAABAA		60s	AAAAAABAA			
	70s	BEEEAAACF	80s	Cfff		70s	AAAAAABAA			
054005	50s	-fCBAAAA	60s	AAAAAABAA		055010	40s	-----eA	50s	AAAAAABAA
	70s	ABBAABBBCC	80s	Cfff		60s	AAAAAABAA			
054006	50s	-fBAAAAA	60s	AAAAAABAA		70s	AAAAAABAA			
	70s	BCBAABBBCC	80s	Cfff		055011	40s	-----eA	50s	AAAAAABAA
054007	50s	-----eA	60s	AAAAAABAA		60s	AAAAAABAA			
	70s	BCCEEBACC	80s	Cfff		70s	AAAAAABAA			
054008	50s	-----eA	60s	AAAAAABAA		055012	40s	-----eA	50s	AAAAAABAA
	70s	BBAAABACC	80s	Cfff		60s	AAAAAABAA			
054010	50s	-----e	60s	AAAAAABAA		055013	40s	-----eA	50s	AAAAAABAA
	70s	eABBAFF	80s	Cfff		60s	AAAAAABAA			
054011	60s	-eAAAAAAB	70s	CCBABBBCC		70s	AAAAAABAA			
	80s	Cfff				055014	40s	-----eA	50s	AAAAAABAA
054012	60s	-eAAAAAAB	70s	AABABBBCC		60s	AAAAAABAA			
	80s	Cfff				70s	AAAAAABAA			
054013	50s	-----a	60s	AAAAAABAA		055015	40s	-----eA	50s	AAAAAABAA
	70s	AABBBBACF	80s	fff		60s	AAAAAABAA			
054014	60s	-fBAAAAA	70s	BAAAAAACC		70s	AAAAAABAA			
	80s	Cfff				055016	40s	-----eA	50s	AAAAAABAA
054015	60s	-----E	70s	FEFEFEACC		60s	AAAAAABAA			
	80s	Cfff				70s	AAAAAABAA			
054016	60s	-eAAAAA	70s	BAAAAAACC		055017	40s	-----eA	50s	AAAAAABAA
	80s	Cfff				60s	AAAAAABAA			
054017	60s	-eAAAAA	70s	BAAAAAACC		70s	AAAAAABAA			
	80s	Cfff				055018	40s	-----eA	50s	AAAAAABAA
054018	60s	-eAAAAA	70s	AAAAAABAA		60s	AAAAAABAA			
	80s	Cfff				70s	AAAAAABAA			
054019	60s	-eAAAAA	70s	AAAAAABAA		055019	40s	-----eA	50s	AAAAAABAA
	80s	Cfff				60s	AAAAAABAA			
054020	60s	-eAAAAA	70s	AAAAAABAA		055020	40s	-----eA	50s	AAAAAABAA
	80s	Cfff				60s	AAAAAABAA			
054021	70s	-----f	80s	fff		70s	AAAAAABAA			
054022	50s	-eAAAA	60s	-----EB		055021	40s	-----eA	50s	AAAAAABAA
	70s	AFAADAEAA	80s	AFA		60s	AAAAAABAA			
054023	60s	-----eA	70s	BBAEfffBCC		70s	AAAAAABAA			
	80s	Cfff				055022	40s	-----eA	50s	AAAAAABAA
054024	60s	-----E	70s	AAAAAABAA		60s	AAAAAABAA			
	80s	Cfff				70s	AAAAAABAA			
054025	60s	-----E	70s	ABAAAAACC		055023	40s	-----eA	50s	AAAAAABAA
	80s	Cfff				60s	AAAAAABAA			
054026	60s	-----F	70s	fFAAACBCC		70s	AAAAAABAA			
	80s	Cfff				055024	40s	-----eA	50s	AAAAAABAA
054027	60s	-----e	70s	aaaaABBBCC		60s	AAAAAABAA			
	80s	Cfff				70s	AAAAAABAA			
054028	60s	-----f	70s	FEAAAAACC		055025	40s	-----eA	50s	AAAAAABAA
	80s	Cfff				60s	AAAAAABAA			
054029	70s	FRBAACCC	80s	Cfff		70s	AAAAAABAA			
054030	70s	FRBAACBCC	80s	Cfff		055026	40s	-----eA	50s	AAAAAABAA
054031	70s	-----fff	80s	fff		60s	AAAAAABAA			
054032	70s	-eAAAAACC	80s	Cfff		70s	AAAAAABAA			
054033	70s	-eAAAAACC	80s	Cfff		055027	40s	-----eA	50s	AAAAAABAA
054034	70s	-eAAAAACC	80s	Cfff		60s	AAAAAABAA			
054035	70s	-eAAAAACC	80s	Cfff		70s	AAAAAABAA			
054036	70s	-eAAAAACC	80s	Cfff		055028	40s	-----eA	50s	AAAAAABAA
054037	70s	-eAAAAACC	80s	Cfff		60s	AAAAAABAA			
054038	70s	-eAAAAACC	80s	Cfff		70s	AAAAAABAA			
054039	70s	-eAAAAACC	80s	Cfff		055029	40s	-----eA	50s	AAAAAABAA
054040	70s	-eAAAAACC	80s	Cfff		60s	AAAAAABAA			
054041	70s	-eAAAAACC	80s	Cfff		70s	AAAAAABAA			
054042	70s	fFAAAfff	60s	cccccccc		055030	40s	-----eA	50s	AAAAAABAA
054043	50s	-----fccc				60s	AAAAAABAA			
	70s	-f	80s	Cfff		70s	AAAAAABAA			
054044	70s	-fFAAAACC	80s	Cfff		055031	40s	-----eA	50s	AAAAAABAA
054045	70s	-----fAAA				60s	AAAAAABAA			
054046	70s	-----eacc	80s	Cfff		70s	AAAAAABAA			
054047	70s	-----ba	80s	Cfff		055032	40s	-----eA	50s	AAAAAABAA
054048	70s	-----eacc	80s	Cfff		60s	AAAAAABAA			
054049	70s	-eAAAA	80s	Cfff		70s	AAAAAABAA			
054050	70s	-eAAAA	80s	Cfff		055033	40s	-----eA	50s	AAAAAABAA
054051	70s	-eAAAA	80s	Cfff		60s	AAAAAABAA			
054052	70s	-eAAAA	80s	Cfff		70s	AAAAAABAA			
054053	70s	-eAAAA	80s	Cfff		055034	40s	-----eA	50s	AAAAAABAA
054054	70s	-eAAAA	80s	Cfff		60s	AAAAAABAA			
054055	70s	-eAAAA	80s	Cfff		70s	AAAAAABAA			
054056	70s	-eAAAA	80s	Cfff		055035	40s	-----eA	50s	AAAAAABAA
054057	70s	-fccccbbcc	80s	c		60s	AAAAAABAA			
054058	70s	-eabba				70s	AAAAAABAA			
054059	70s	-eabbbEfff				056001	50s	-----FAA	60s	AAAAAABAA
054060	70s	-eabba				70s	AAAAAABAA			
054061	70s	-eabba				056002	50s	-----FAA	60s	AAAAAABAA
054062	70s	-eABBFfff				70s	AAAAAABAA			
054063	70s	-bbba				056003	50s	-----FAA	60s	AAAAAABAA
054064	70s	-----ee				70s	AAAAAABAA			
054065	70s	-eab				056004	50s	-----FAA	60s	AAAAAABAA
054066	70s	-eab				70s	AAAAAABAA			
054067	70s	-fMc	80s	f		056005	50s	-----FAA	60s	AAAAAABAA
054068	70s	-----cc	80s	Cfff		70s	AAAAAABAA			
054069	70s	-----cc	80s	Cfff		056006	50s	-----FAA	60s	AAAAAABAA
054070	70s	-----cc	80s	Cfff		70s	AAAAAABAA			
054071	70s	-----cc	80s	Cfff		056007	50s	-----FAA	60s	AAAAAABAA
054072	70s	-----cc	80s	Cfff		70s	AAAAAABAA			
054073	70s	-----cc	80s	Cfff		056008	50s	-----FAA	60s	AAAAAABAA
054074	70s	-----cc	80s	Cfff		70s	AAAAAABAA			
054075	70s	-----cc	80s	Cfff		056009	50s	-----FAA	60s	AAAAAABAA
054076	70s	-----cc	80s	Cfff		70s	AAAAAABAA			
054077	70s	-----cc	80s	Cfff		056010	50s	-----FAA	60s	AAAAAABAA
054078	70s	-----cc	80s	Cfff		70s	AAAAAABAA			
054079	70s	-----cc	80s	Cfff		056011	50s	-----FAA	60s	AAAAAABAA
054080	70s	-----cc	80s	Cfff		70s	AAAAAABAA			
054081	70s	-----cc	80s	Cfff		056012	50s	-----FAA	60s	AAAAAABAA
054082	70s	-----cc	80s	Cfff		70s	AAAAAABAA			
054083	70s	-----cc	80s	Cfff		056013	50s	-----FAA	60s	AAAAAABAA
054084	70s	-----cc	80s	Cfff		70s	AAAAAABAA			
054085	70s	-----cc	80s	Cfff		056014	50s	-----FAA	60s	AAAAAABAA
054086	70s	-----cc	80s	Cfff		70s	AAAAAABAA			
054087	70s	-----cc	80s	Cfff		056015	50s	-----FAA	60s	AAAAAABAA
054088	70s	-----cc	80s	Cfff		70s	AAAAAABAA			
054089	70s	-----cc	80s	Cfff		056016	50s	-----FAA	60s	AAAAAABAA
054090	70s	-----cc	80s	Cfff		70s	AAAAAABAA			
054091	70s	-----cc	80s	Cfff		056017	50s	-----FAA	60s	AAAAAABAA
054092	70s	-----cc	80s	Cfff		70s	AAAAAABAA			
054111	70s	-----cc	80s	Cfff		056018	50s	-----FAA	60s	AAAAAABAA
055001	30s	-----fBA	40s	AABAAAAAA		057001	30s	-----eER	40s	e-----
	50s	AAAAAABAA	60s	AAAAAABAA		50s	-eAABAA	60s	AAAAAABAA	
	70s	Ae-----fff				70s	AAAAfff	80s	fff	
055002	30s	-----eaa	40s	AAAAAABAA		057002	30s	-eAABAA	40s	AAAAAABAA
	50s	AAAAAABAA	60s	AAAAAABAA		50s	AADDAABAA	60s	AAAAAABAA	
	70s	AAAAAABAA	80s	ABff		70s	ABAAfff	80s	fff	
055003	30s	-----e	40s	AAAAAABAA		057003	60s	-----eA	70s	AAAAAABAA
	50s	AAAAAABAA	60s	AAAAAABAA		80s	fff			
	70s	AAAAAABAA	80s	AEf		057004	50s	-----eA	60s	AEEAAAAAA
	80s	AAAAAABAA				70s	AAAAAABAA	80s	AAACc	
056004	30s	-----eAA	40s	AAAAAABAA		057005	70s	AAAAAABAA	80s	AAACc
	50s	AAAAAABAA	60s	AAAAAABAA		057006	70s	AAAAAABAA	80s	AAACc
	70s	AAAAAABAA	80s	AEf		057007	70s	AAAAAABAA	80s	AAACc
	80s	AAAAAABAA				057008	70s	AAAAAABAA	80s	AAACc
	90s	AAAAAABAA				057009	70s	AAAAAABAA	80s	AAACc
	100s	AAAAAABAA				057010	70s	AAAAAABAA	80s	AAACc
	110s	AAAAAABAA				057011	70s	AAAAAABAA	80s	AAACc
	120s	AAAAAABAA				057012	70s	AAAAAABAA	80s	AAACc
	130s	AAAAAABAA				057013	70s	AAAAAABAA	80s	AAACc
	140s	AAAAAABAA				057014	70s	AAAAAABAA	80s	AAACc
	150s	AAAAAABAA				057015	70s	AAAAAABAA	80s	AAACc
	160s	AAAAAABAA				057016	70s	AAAAAABAA	80s	AAACc
	170s	AAAAAABAA				057017	70s	AAAAAABAA	80s	AAACc
	180s	AAAAAABAA				057018	70s	AAAAAABAA	80s	AAACc
	190s	AAAAAABAA				057019	70s	AAAAAABAA	80s	AAACc
	200s	AAAAAABAA				057020	70s</			

Stn. number	Gauged daily flows, monthly peaks and rainfall		Stn. number	Gauged daily flows, monthly peaks and rainfall		Stn. number	Gauged daily flows, monthly peaks and rainfall							
068007	60s	--eAAAAAA	70s	AAAAEAAFA	074003	70s	--eEAAAAA	80s	AAAAA	084004	50s	-----eAA	60s	AAAAA
068010	80s	AAAE	80s	AAAE	074005	70s	--eEAAAAA	80s	AAAAA	084005	70s	AAAAA	80s	AAAAA
068011	70s	-----f	80s	ff	074006	60s	-----fccc	70s	ccf-bBBAA	084006	50s	-----eA	60s	AAAAA
068018	70s	-----f	80s	ff	074007	70s	-----f	80s	EEA	084007	50s	AAAAA	60s	AAAAA
068019	80s	ffff	80s	ffff	074008	70s	-----e	80s	---e	084008	60s	AAAAA	70s	AAAAA
068020	80s	---aa			075001	30s	-----fEEff	40s	fffffAAAA	084009	60s	-----eAAA	70s	AAAAA
069001	30s	-----ebabBB	40s	8888888888	075002	50s	AAAAA	60s	AAABAAAAEE	084010	60s	-----eAAA	70s	AAAAA
069002	50s	AAAAA	60s	BAAAAAA	075003	70s	EEfAAAAA	80s	AAAAA	084011	60s	AAAAA	70s	AAAAA
069003	70s	AAABAAAA	80s	ffff	075004	60s	8888888888	70s	AAABAAAA	084012	60s	AAAAA	70s	AAAAA
069004	40s	-----e	50s	AAAAA	075005	60s	8888888888	70s	AAAAA	084013	60s	AAAAA	70s	AAAAA
069005	60s	AAAAAAEAA	70s	AAAEfAAAA	075006	60s	AAAAA	70s	BAABAAABAA	084014	60s	AAAAA	70s	AAAAA
069006	80s	ABAA	80s	AAAAA	075007	60s	AAAAA	70s	BAABAAABAA	084015	60s	AAAAA	70s	AAAAA
069007	30s	-----e	40s	-----e	075008	60s	AAAAA	70s	BAABAAABAA	084016	60s	AAAAA	70s	AAAAA
069008	50s	AAAAAAEAA	60s	AAAAAAEAA	075009	60s	AAAAA	70s	BAABAAABAA	084017	60s	AAAAA	70s	AAAAA
069009	70s	AAAEfAAEAE	80s	AAAAA	075010	60s	AAAAA	70s	BAABAAABAA	084018	60s	AAAAA	70s	AAAAA
069010	50s	-----e	60s	AAAAAAEAA	075011	60s	AAAAA	70s	BAABAAABAA	084019	60s	AAAAA	70s	AAAAA
069011	70s	AAAEfAAEAE	80s	AAAAA	075012	60s	AAAAA	70s	BAABAAABAA	084020	60s	AAAAA	70s	AAAAA
069012	50s	-----e	60s	AAAAAAEAA	075013	60s	AAAAA	70s	BAABAAABAA	084021	60s	AAAAA	70s	AAAAA
069013	70s	AAAEfAAEAE	80s	AAAAA	075014	60s	AAAAA	70s	BAABAAABAA	084022	60s	AAAAA	70s	AAAAA
069014	50s	-----e	60s	AAAAAAEAA	075015	60s	AAAAA	70s	BAABAAABAA	084023	60s	AAAAA	70s	AAAAA
069015	70s	AAAEfAAEAE	80s	AAAAA	075016	60s	AAAAA	70s	BAABAAABAA	084024	60s	AAAAA	70s	AAAAA
069016	50s	-----e	60s	AAAAAAEAA	075017	60s	AAAAA	70s	BAABAAABAA	084025	60s	AAAAA	70s	AAAAA
069017	70s	AAAEfAAEAE	80s	AAAAA	075018	60s	AAAAA	70s	BAABAAABAA	084026	60s	AAAAA	70s	AAAAA
069018	50s	-----e	60s	AAAAAAEAA	075019	60s	AAAAA	70s	BAABAAABAA	084027	60s	AAAAA	70s	AAAAA
069019	70s	AAAEfAAEAE	80s	AAAAA	075020	60s	AAAAA	70s	BAABAAABAA	084028	60s	AAAAA	70s	AAAAA
069020	50s	-----e	60s	AAAAAAEAA	075021	60s	AAAAA	70s	BAABAAABAA	084029	60s	AAAAA	70s	AAAAA
069021	70s	AAAEfAAEAE	80s	AAAAA	075022	60s	AAAAA	70s	BAABAAABAA	084030	60s	AAAAA	70s	AAAAA
069022	50s	-----e	60s	AAAAAAEAA	075023	60s	AAAAA	70s	BAABAAABAA	084031	60s	AAAAA	70s	AAAAA
069023	70s	AAAEfAAEAE	80s	AAAAA	075024	60s	AAAAA	70s	BAABAAABAA	084032	60s	AAAAA	70s	AAAAA
069024	50s	-----e	60s	AAAAAAEAA	075025	60s	AAAAA	70s	BAABAAABAA	084033	60s	AAAAA	70s	AAAAA
069025	70s	AAAEfAAEAE	80s	AAAAA	075026	60s	AAAAA	70s	BAABAAABAA	084034	60s	AAAAA	70s	AAAAA
069026	50s	-----e	60s	AAAAAAEAA	075027	60s	AAAAA	70s	BAABAAABAA	084035	60s	AAAAA	70s	AAAAA
069027	70s	AAAEfAAEAE	80s	AAAAA	075028	60s	AAAAA	70s	BAABAAABAA	084036	60s	AAAAA	70s	AAAAA
069028	50s	-----e	60s	AAAAAAEAA	075029	60s	AAAAA	70s	BAABAAABAA	084037	60s	AAAAA	70s	AAAAA
069029	70s	AAAEfAAEAE	80s	AAAAA	075030	60s	AAAAA	70s	BAABAAABAA	084038	60s	AAAAA	70s	AAAAA
069030	50s	-----e	60s	AAAAAAEAA	075031	60s	AAAAA	70s	BAABAAABAA	084039	60s	AAAAA	70s	AAAAA
069031	70s	AAAEfAAEAE	80s	AAAAA	075032	60s	AAAAA	70s	BAABAAABAA	084040	60s	AAAAA	70s	AAAAA
069032	50s	-----e	60s	AAAAAAEAA	075033	60s	AAAAA	70s	BAABAAABAA	084041	60s	AAAAA	70s	AAAAA
069033	70s	AAAEfAAEAE	80s	AAAAA	075034	60s	AAAAA	70s	BAABAAABAA	084042	60s	AAAAA	70s	AAAAA
069034	50s	-----e	60s	AAAAAAEAA	075035	60s	AAAAA	70s	BAABAAABAA	084043	60s	AAAAA	70s	AAAAA
069035	70s	AAAEfAAEAE	80s	AAAAA	075036	60s	AAAAA	70s	BAABAAABAA	084044	60s	AAAAA	70s	AAAAA
069036	50s	-----e	60s	AAAAAAEAA	075037	60s	AAAAA	70s	BAABAAABAA	084045	60s	AAAAA	70s	AAAAA
069037	70s	AAAEfAAEAE	80s	AAAAA	075038	60s	AAAAA	70s	BAABAAABAA	084046	60s	AAAAA	70s	AAAAA
069038	50s	-----e	60s	AAAAAAEAA	075039	60s	AAAAA	70s	BAABAAABAA	084047	60s	AAAAA	70s	AAAAA
069039	70s	AAAEfAAEAE	80s	AAAAA	075040	60s	AAAAA	70s	BAABAAABAA	084048	60s	AAAAA	70s	AAAAA
069040	50s	-----e	60s	AAAAAAEAA	075041	60s	AAAAA	70s	BAABAAABAA	084049	60s	AAAAA	70s	AAAAA
069041	70s	AAAEfAAEAE	80s	AAAAA	075042	60s	AAAAA	70s	BAABAAABAA	084050	60s	AAAAA	70s	AAAAA
069042	50s	-----e	60s	AAAAAAEAA	075043	60s	AAAAA	70s	BAABAAABAA	084051	60s	AAAAA	70s	AAAAA
069043	70s	AAAEfAAEAE	80s	AAAAA	075044	60s	AAAAA	70s	BAABAAABAA	084052	60s	AAAAA	70s	AAAAA
069044	50s	-----e	60s	AAAAAAEAA	075045	60s	AAAAA	70s	BAABAAABAA	084053	60s	AAAAA	70s	AAAAA
069045	70s	AAAEfAAEAE	80s	AAAAA	075046	60s	AAAAA	70s	BAABAAABAA	084054	60s	AAAAA	70s	AAAAA
069046	50s	-----e	60s	AAAAAAEAA	075047	60s	AAAAA	70s	BAABAAABAA	084055	60s	AAAAA	70s	AAAAA
069047	70s	AAAEfAAEAE	80s	AAAAA	075048	60s	AAAAA	70s	BAABAAABAA	084056	60s	AAAAA	70s	AAAAA
069048	50s	-----e	60s	AAAAAAEAA	075049	60s	AAAAA	70s	BAABAAABAA	084057	60s	AAAAA	70s	AAAAA
069049	70s	AAAEfAAEAE	80s	AAAAA	075050	60s	AAAAA	70s	BAABAAABAA	084058	60s	AAAAA	70s	AAAAA
069050	50s	-----e	60s	AAAAAAEAA	075051	60s	AAAAA	70s	BAABAAABAA	084059	60s	AAAAA	70s	AAAAA
069051	70s	AAAEfAAEAE	80s	AAAAA	075052	60s	AAAAA	70s	BAABAAABAA	084060	60s	AAAAA	70s	AAAAA
069052	50s	-----e	60s	AAAAAAEAA	075053	60s	AAAAA	70s	BAABAAABAA	084061	60s	AAAAA	70s	AAAAA
069053	70s	AAAEfAAEAE	80s	AAAAA	075054	60s	AAAAA	70s	BAABAAABAA	084062	60s	AAAAA	70s	AAAAA
069054	50s	-----e	60s	AAAAAAEAA	075055	60s	AAAAA	70s	BAABAAABAA	084063	60s	AAAAA	70s	AAAAA
069055	70s	AAAEfAAEAE	80s	AAAAA	075056	60s	AAAAA	70s	BAABAAABAA	084064	60s	AAAAA	70s	AAAAA
069056	50s	-----e	60s	AAAAAAEAA	075057	60s	AAAAA	70s	BAABAAABAA	084065	60s	AAAAA	70s	AAAAA
069057	70s	AAAEfAAEAE	80s	AAAAA	075058	60s	AAAAA	70s	BAABAAABAA	084066	60s	AAAAA	70s	AAAAA
069058	50s	-----e	60s	AAAAAAEAA	075059	60s	AAAAA	70s	BAABAAABAA	084067	60s	AAAAA	70s	AAAAA
069059	70s	AAAEfAAEAE	80s	AAAAA	075060	60s	AAAAA	70s	BAABAAABAA	084068	60s	AAAAA	70s	AAAAA
069060	50s	-----e	60s	AAAAAAEAA	075061	60s	AAAAA	70s	BAABAAABAA	084069	60s	AAAAA	70s	AAAAA
069061	70s	AAAEfAAEAE	80s	AAAAA	075062	60s	AAAAA	70s	BAABAAABAA	084070	60s	AAAAA	70s	AAAAA
069062	50s	-----e	60s	AAAAAAEAA	075063	60s	AAAAA	70s	BAABAAABAA	084071	60s	AAAAA	70s	AAAAA
069063	70s	AAAEfAAEAE	80s	AAAAA	075064	60s	AAAAA	70s	BAABAAABAA	084072	60s	AAAAA	70s	AAAAA
069064	50s	-----e	60s	AAAAAAEAA	075065	60s	AAAAA	70s	BAABAAABAA	084073	60s	AAAAA	70s	AAAAA
069065	70s	AAAEfAAEAE	80s	AAAAA	075066	60s	AAAAA	70s	BAABAAABAA	084074	60s	AAAAA	70s	AAAAA
069066	50s	-----e	60s	AAAAAAEAA	075067	60s	AAAAA	70s	BAABAAABAA	084075	60s	AAAAA	70s	AAAAA
069067	70s	AAAEfAAEAE	80s	AAAAA	075068	60s	AAAAA	70s	BAABAAABAA	084076	60s	AAAAA	70s	AAAAA
069068	50s	-----e	60s	AAAAAAEAA	075069	60s	AAAAA	70s	BAABAAABAA	084077	60s	AAAAA	70s	AAAAA
069069	70s	AAAEfAAEAE	80s	AAAAA	075070	60s	AAAAA	70s	BAABAAABAA	084078	60s	AAAAA	70s	AAAAA
069070	50s	-----e	60s	AAAAAAEAA	075071	60s	AAAAA	70s	BAABAAABAA	084079	60s	AAAAA	70s	AAAAA
069071	70s	AAAEfAAEAE	80s	AAAAA	075072	60s	AAAAA	70s	BAABAAABAA	084080	60s	AAAAA	70s	AAAAA
069072	50s	-----e	60s	AAAAAAEAA	075073	60s	AAAAA	70s	BAABAAABAA	084081	60s	AAAAA	70s	AAAAA
069073	70s	AAAEfAAEAE	80s	AAAAA	075074	60s	AAAAA	70s	BAABAAABAA	084082	60s	AAAAA	70s	AAAAA
069074	50s	-----e	60s	AAAAAAEAA	075075	60s	AAAAA	70s	BAABAAABAA	084083	60s	AAAAA	70s	AAAAA
069075	70s	AAAEfAAEAE	80s	AAAAA	075076	60s	AAAAA	70s	BAABAAABAA	084084	60s	AAAAA	70s	AAAAA
069076	50s	-----e	60s	AAAAAAEAA	075077	60s	AAAAA	70s	BAABAAABAA	084085	60s	AAAAA	70s	AAAAA
069077	70s	AAAEfAAEAE	80s	AAAAA	075078	60s	AAAAA	70s	BAABAAABAA	084086	60s	AAAAA	70s	AAAAA
069078	50s	-----e	60s	AAAAAAEAA	075079	60s	AAAAA	70s	BAABAAABAA	084087	60s	AAAAA	70s	AAAAA
069079	70s	AAAEfAAEAE	80s	AAAAA	075080	60s	AAAAA	70s	BAABAAABAA	084088	60s	AAAAA	70s	AAAAA
069080	50s	-----e	60s	AAAAAAEAA	075081	60s	AAAAA	70s	BAABAAABAA	084089	60s	AAAAA	70s	AAAAA
069081	70s	AAAEfAAEAE	80s	AAAAA	075082	60s	AAAAA	70s	BAABAAABAA	084090	60s	AAAAA	70s	AAAAA
069082	50s	-----e	60s	AAAAAAEAA	075083	60s	AAAAA	70s	BAABAAABAA	084091	60s	AAAAA	70s	AAAAA
069083	70s	AAAEfAAEAE	80s	AAAAA	075084	60s	AAAAA	70s	BAABAAABAA	084092	60s	AAAAA	70s	AAAAA
069084	50s	-----e	60s	AAAAAAEAA	075085	60s	AAAAA	70s	BAABAAABAA	084093	60s	AAAAA	70s	AAAAA
069085	70s	AAAEfAAEAE	80s	AAAAA	075086	60s	AAAAA	70s	BAABAAABAA	084094	60s	AAAAA	70s	AAAAA
069086	50s	-----e	60s	AAAAAAEAA	075087	60s	AAAAA	70s	BAABAAABAA	084095	60s	AAAAA	70s	AAAAA
069087	70s	AAAEfAAEAE	80s	AAAAA	075088	60s	AAAAA	70s	BAABAAABAA					

Naturalised daily and monthly flows

KEY:

Complete daily and complete monthly A
 Partial daily and complete monthly B
 Partial daily and partial monthly C
 Partial daily and no monthly D
 No daily and complete monthly E
 No daily and partial monthly F
 No naturalised flow data -

Summary is presented
 in decade blocks

Stn number	Naturalised daily and monthly flows	Stn number	Naturalised daily and monthly flows	Stn number	Naturalised daily and monthly flows
006007	70s ---EEEEEEF	025002	70s FFFF	033005	50s ---FEFEFEF 60s EEEEEEBBAA
007003	60s FFEFE 70s EEEEEEEEEE	025004	50s -----FEE 60s FFEFEBAACC	033006	70s AC 50s -----FEFE 60s EEEF
008001	30s -----FE 40s FFEFEFEFE	025008	60s -----CAAB 70s BBFF	033007	50s -----FEFEFE 60s EEEFECCCF
008005	50s EEEEEEEEEE 70s -F-E	026002	60s -----FFEEF 70s FFFF	033011	60s -FEF
012002	70s --F-- 80s F	027001	30s -----FF- 40s -FEFEF -	033026	70s CAAAC
012004	70s -----LEE 80s E	027002	50s -----FEEEF 60s FFEFEFF-F	033036	50s -----CA 60s AAAABAAAAA
014001	70s -----F--E	027003	70s E-----FEEEE	038001	30s --CAAAAAA 40s AAAAAA
014002	70s -- F F	027004	60s FEEFEFEF	038002	50s AAAAAA 60s AAAAAA
015003	70s -----F 80s F	027005	40s -----FEFE 50s EEEFEFEFE	038003	60s -CAAAAAA 70s AAAAAA
015006	60s -----FEE 70s F-----	027006	60s EEEFEFEFE 70s FF	038004	60s -----CAAA 70s AAAAAA
015007	70s --- E 80s F	027007	50s -----FE 60s FFEFEFEFE	038005	60s -CAAAAAA 70s AAAAAA
015008	80s F	027009	70s FF	038006	60s -----CAAA 70s AAAAAA
015010	70s -----EEEF 80s F	027011	50s -----FEEEEE 60s FFEFEFEFE	038008	60s CAAAAA 70s AAAAAA
015011	70s FFEFEFE 80s E	027012	50s EEF	038009	60s -----CC 70s AAAAAA
015012	70s -----E-FF 80s F	027013	50s -----FEFEFE 60s EEEFEFEFE	038010	60s -- CA 70s AAAAAA
015013	70s -----EEFE 80s F	027015	50s EF	038011	60s -----CA 70s AAAAAA
015016	70s -----EEFE 80s F	027016	50s EF	038012	60s --CA
015017	70s --- --F	027017	50s EF	038015	70s --CAAC
016001	60s -----FEEFE 70s FFEFEFEFE	027018	50s -----FEEF 60s FFEFEFEFE	037001	50s CAAAAA 60s AAAAAA
016004	70s F -FEFE 80s E	027019	50s EEF	037002	30s CAAAAA 40s ACCAAAAA
017001	60s -----F 70s FF----	027020	50s -----FEEF 60s EEEFEFEFE	037003	50s AAAAAA 60s AAAAAA
017002	60s -----F 70s EF----	027021	60s FEEF	037004	30s -CAAAAAA 40s AAAAAA
017003	70s --- F	027022	60s FFEFEFEFE 70s EF	037005	50s -F-FBFEF 60s EEEBAAC
017004	70s -----E	027023	60s FFEFEFEFE 70s EF	037006	60s --CAAAAAA 70s AAAAAA
017005	70s -----E	027024	60s FFEFEFEFE 70s EF	037007	60s -----CAAA 70s AAAAAA
018001	70s -----E	027025	60s FFEFEFEFE 70s EF	037008	60s -CAAAAAA 70s AAAAAA
018002	60s -----FEEF 70s F-----E	027026	60s FFEFEFEFE 70s EEF	037009	60s CAAAAA 70s AAAAAA
018003	60s -----FEEFE 70s EF-----E	027027	60s FFEFEFEFE 70s EEF	037010	60s CAAAAA 70s AAAAAA
018005	70s -----E	027028	60s FFEFEFEFE 70s FF	037011	60s CAAAAA 70s AAAAAA
018008	70s F	027029	60s FFEFEFEFE 70s FF	037012	60s CAAAAA 70s AAAAAA
019001	50s -----EEE 60s EEEEEEEEEE	027030	60s FFEFEFEFE 70s EF	037013	60s CAAAAA 70s AAAAAA
019002	60s FFEFEFE	027031	60s FFEFEFEFE 70s EF	037014	60s CAAAAA 70s AAAAAA
019003	60s FFEFEFEFE	027032	60s FFEFEFEFE 70s EF	037015	60s CAAAAA 70s AAAAAA
019004	60s FFEFEFEFE	027033	60s FFEFEFEFE 70s EF	037016	60s CAAAAA 70s AAAAAA
019005	60s FFEFEFEFE	027034	60s FFEFEFEFE 70s EF	037017	60s CAAAAA 70s AAAAAA
019006	60s FFEFEFEFE	027035	60s FFEFEFEFE 70s EF	037018	60s CAAAAA 70s AAAAAA
019007	60s FFEFEFEFE	028001	30s -----FEE 40s F-----F	037019	60s CAAAAA 70s AAAAAA
019008	60s FFEFEFEFE	028002	50s EEEFEFEFE 60s EEEEBAAAA	037020	60s CAAAAA 70s AAAAAA
019009	60s FFEFEFEFE	028003	60s EEEFEFEFE 70s EEEEBAAAA	037021	60s CAAAAA 70s AAAAAA
019010	60s FFEFEFEFE	028004	40s -----FEEFE 50s FFEFEFEFE	037022	60s CAAAAA 70s AAAAAA
019011	70s -----F	028005	60s EEEFEBAACC 70s CC--CC	037023	60s CAAAAA 70s AAAAAA
020001	60s EEEEEEEEEE 70s EEEEEEEEEE	030003	60s -----FF	037024	60s CAAAAA 70s AAAAAA
020002	60s -----FF 70s FFEFEFE	031001	40s FFEFEFEFE 50s --FEFEFEF	038001	30s --DAAAAAA 40s AAAAAA
020003	60s -----FEEFE 70s EEEEEE	031002	60s EEEFEBAACA	038002	50s AAAAAA 60s AAAAAA
020004	60s -----EEE 70s EEEEEEEEEE	031003	60s FFEFEFEFE	038003	70s AAAAAA 80s AAAAD
020005	70s -----F	031004	60s FFEFEFEFE 70s FFFF	039001	80s AAAAAA 90s AAAAAA
020006	70s -----E	031005	60s FFEFEFEFE 70s FF--FF	039002	70s AAAAAA 10s AAAAAA
020007	70s F	031006	60s FFEFEFEFE 70s FF--FF	039003	60s AAAAAA 30s AAAAAA
021001	50s -----F 60s EEEFEFEF	031007	60s FFEFEFEFE 70s FF--FF	039004	40s AAAAAA 50s AAAAAA
021002	50s -----F 60s EEEFEFEF	031008	60s FFEFEFEFE 70s FF--FF	039005	60s AAAAAA 70s AAAAAA
021003	50s -----F 60s EEEFEFEF	031009	60s FFEFEFEFE 70s FF--FF	039006	80s AAAAAA
021004	60s FFEFEFEFE	031010	60s FFEFEFEFE 70s FF--FF	039007	50s AAAAAA 60s AAAAAA
021005	60s FFEFEFEFE	031011	60s FFEFEFEFE 70s FF--FF	039008	70s AAAAAA 80s AAAAAA
021006	60s FFEFEFEFE	031012	60s FFEFEFEFE 70s FF--FF	039009	60s AAAAAA 80s AAAAAA
021009	60s FFEFEFEFE	031013	60s FFEFEFEFE 70s FF--FF	039010	60s AAAAAA 80s AAAAAA
021010	60s FFEFEFEFE	031014	60s FFEFEFEFE 70s FF--FF	039011	60s AAAAAA
021011	60s FFEFEFEFE	031015	60s FFEFEFEFE 70s FF--FF	040001	50s FFEFEFEFE 60s FFEFEFEF
021012	60s FFEFEFEFE	031016	60s FFEFEFEFE 70s FF--FF	040002	50s FFEFEFEFE 60s FFEFEFEF
021013	60s FFEFEFEFE	031017	60s FFEFEFEFE 70s FF--FF	040003	50s FFEFEFEFE 60s FFEFEFEF
021014	60s FFEFEFEFE	031018	60s FFEFEFEFE 70s FF--FF	040004	60s FFEFEFEFE 60s FFEFEFEF
021015	60s FFEFEFEFE	031019	60s FFEFEFEFE 70s FF--FF	040005	60s FFEFEFEFE 60s FFEFEFEF
021016	60s FFEFEFEFE	031020	60s FFEFEFEFE 70s FF--FF	040006	60s FFEFEFEFE 60s FFEFEFEF
021017	60s FFEFEFEFE	031021	60s FFEFEFEFE 70s FF--FF	040007	60s FFEFEFEFE 60s FFEFEFEF
021018	60s FFEFEFEFE	031022	60s FFEFEFEFE 70s FF--FF	040008	60s FFEFEFEFE 60s FFEFEFEF
021019	60s FFEFEFEFE	032001	40s FFEFEFEFE 50s FFEFEFEFE	040009	60s FFEFEFEFE 60s FFEFEFEF
021020	60s FFEFEFEFE	032002	60s FFEFEFEFE 60s FFEFEFEFE	040010	60s FFEFEFEFE 60s FFEFEFEF
021021	60s FFEFEFEFE	032003	60s FFEFEFEFE 70s FFEFEFEFE	040011	60s FFEFEFEFE
021022	60s FFEFEFEFE	032004	40s -----FEEEEE 50s EEEFEFEFE	043003	60s FFEFEFEFE
021023	60s FFEFEFEFE	032005	60s EEEFEFEFE 70s FFEFEFEFE	043005	60s FFEFEFEFE
021024	60s FFEFEFEFE	032006	60s -----F 70s EEEFEFEFE	043006	60s FFEFEFEFE
021025	60s FFEFEFEFE	032007	60s -----F 70s EEEFEFEFE	043007	60s FFEFEFEFE
021026	60s FFEFEFEFE	032008	40s -----FEEFE 50s EEEFEFEFE	043008	60s FFEFEFEFE
021027	60s FFEFEFEFE	032009	60s EEEFEFEFE 70s FFEFEFEFE	043009	60s FFEFEFEFE
021028	60s FFEFEFEFE	032010	60s FFEFEFEFE 70s FFEFEFEFE	043010	60s FFEFEFEFE
021029	60s FFEFEFEFE	032011	60s FFEFEFEFE 70s FFEFEFEFE	043011	60s FFEFEFEFE
021030	60s FFEFEFEFE	032012	60s FFEFEFEFE 70s FFEFEFEFE	043012	60s FFEFEFEFE
021031	60s FFEFEFEFE	032013	60s FFEFEFEFE 70s FFEFEFEFE	043013	60s FFEFEFEFE
021032	60s FFEFEFEFE	032014	60s FFEFEFEFE 70s FFEFEFEFE	043014	60s FFEFEFEFE
021033	60s FFEFEFEFE	032015	60s FFEFEFEFE 70s FFEFEFEFE	043015	60s FFEFEFEFE
021034	60s FFEFEFEFE	032016	60s FFEFEFEFE 70s FFEFEFEFE	043016	60s FFEFEFEFE
021035	60s FFEFEFEFE	032017	60s FFEFEFEFE 70s FFEFEFEFE	043017	60s FFEFEFEFE
021036	60s FFEFEFEFE	032018	60s FFEFEFEFE 70s FFEFEFEFE	043018	60s FFEFEFEFE
021037	60s FFEFEFEFE	032019	60s FFEFEFEFE 70s FFEFEFEFE	043019	60s FFEFEFEFE
021038	60s FFEFEFEFE	032020	60s FFEFEFEFE 70s FFEFEFEFE	043020	60s FFEFEFEFE
021039	60s FFEFEFEFE	032021	60s FFEFEFEFE 70s FFEFEFEFE	043021	60s FFEFEFEFE
021040	60s FFEFEFEFE	032022	60s FFEFEFEFE 70s FFEFEFEFE	043022	60s FFEFEFEFE
021041	60s FFEFEFEFE	032023	60s FFEFEFEFE 70s FFEFEFEFE	043023	60s FFEFEFEFE
021042	60s FFEFEFEFE	032024	60s FFEFEFEFE 70s FFEFEFEFE	043024	60s FFEFEFEFE
021043	60s FFEFEFEFE	032025	60s FFEFEFEFE 70s FFEFEFEFE	043025	60s FFEFEFEFE
021044	60s FFEFEFEFE	032026	60s FFEFEFEFE 70s FFEFEFEFE	043026	60s FFEFEFEFE
021045	60s FFEFEFEFE	032027	60s FFEFEFEFE 70s FFEFEFEFE	043027	60s FFEFEFEFE
021046	60s FFEFEFEFE	032028	60s FFEFEFEFE 70s FFEFEFEFE	043028	60s FFEFEFEFE
021047	60s FFEFEFEFE	032029	60s FFEFEFEFE 70s FFEFEFEFE	043029	60s FFEFEFEFE
021048	60s FFEFEFEFE	032030	60s FFEFEFEFE 70s FFEFEFEFE	043030	60s FFEFEFEFE
021049	60s FFEFEFEFE	032031	60s FFEFEFEFE 70s FFEFEFEFE	043031	60s FFEFEFEFE
021050	60s FFEFEFEFE	032032	60s FFEFEFEFE 70s FFEFEFEFE	043032	60s FFEFEFEFE
021051	60s FFEFEFEFE	032033	60s FFEFEFEFE 70s FFEFEFEFE	043033	60s FFEFEFEFE
021052	60s FFEFEFEFE	032034	60s FFEFEFEFE 70s FFEFEFEFE	043034	60s FFEFEFEFE
021053	60s FFEFEFEFE	032035	60s FFEFEFEFE 70s FFEFEFEFE	043035	60s FFEFEFEFE
021054	60s FFEFEFEFE	032036	60s FFEFEFEFE 70s FFEFEFEFE	043036	60s FFEFEFEFE
021055	60s FFEFEFEFE	032037	60s FFEFEFEFE 70s FFEFEFEFE	043037	60s FFEFEFEFE
021056	60s FFEFEFEFE	032038	60s FFEFEFEFE 70s FFEFEFEFE	043038	60s FFEFEFEFE
021057	60s FFEFEFEFE	032039	60s FFEFEFEFE 70s FFEFEFEFE	043039	60s FFEFEFEFE
021058	60s FFEFEFEFE	032040	60s FFEFEFEFE 70s FFEFEFEFE	043040	60s FFEFEFEFE
021059	60s FFEFEFEFE	032041	60s FFEFEFEFE 70s FFEFEFEFE	043041	60s FFEFEFEFE
021060	60s FFEFEFEFE	032042	60s FFEFEFEFE 70s FFEFEFEFE	043042	60s FFEFEFEFE
021061	60s FFEFEFEFE	032043	60s FFEFEFEFE 70s FFEFEFEFE	043043	60s FFEFEFEFE
021062	60s FFEFEFEFE	032044	60s FFEFEFEFE 70s FFEFEFEFE	043044	60s FFEFEFEFE
021063	60s FFEFEFEFE	032045	60s FFEFEFEFE 70s FFEFEFEFE	043045	60s FFEFEFEFE
021064	60s FFEFEFEFE	032046	60s FFEFEFEFE 70s FFEFEFEFE	043046	60s FFEFEFEFE
021065	60s FFEFEFEFE	032047	60s FFEFEFEFE 70s FFEFEFEFE	043047	60s FFEFEFEFE
021066	60s FFEFEFEFE	032048	60s FFEFEFEFE 70s FFEFEFEFE	043048	60s FFEFEFEFE
021067	60s FFEFEFEFE	032049	60s FFEFEFEFE 70s FFEFEFEFE	043049	60s FFEFEFEFE
021068	60s FFEFEFEFE	032050	60s FFEFEFEFE 70s FFEFEFEFE	043050	60s FFEFEFEFE
021069	60s FFEFEFEFE	032051	60s FFEFEFEFE 70s FFEFEFEFE	043051	60s FFEFEFEFE
021070	60s FFEFEFEFE	032052	60s FFEFEFEFE 70s FFEFEFEFE	043052	60s FFEFEFEFE
021071	60s FFEFEFEFE	032053	60s FFEFEFEFE 70s FFEFEFEFE	043053	60s FFEFEFEFE
021072	60s FFEFEFEFE	032054	60s FFEFEFEFE 70s FFEFEFEFE	043054	60s FFEFEFEFE
021073	60s FFEFEFEFE	032055	60s FFEFEFEFE 70s FFEFEFEFE	043055	60s FFEFEFEFE
021074	60s FFEFEFEFE	0			

Stn. number	Naturalised daily and monthly flows			Stn. number	Naturalised daily and monthly flows			Stn. number	Naturalised daily and monthly flows				
049003	50s	-----CCC		057001	50s	--FEEEEEEE	60s	EEFEFEBC	076001	50s	FFFF	60s	FFFEFEFE
050001	60s	-----A	70s	057002	30s	-----FEE	40s	EEFEFEFE	076003	70s	F	70s	FFFEFEFE
050002	60s	--FEEBBEBA	70s		50s	FFFEFFFF	60s	FEFEFBAAA	076004	60s	FFFEFE		
			C		70s	C			076004	60s	--FEF		
051002	70s	.FEFEF		057003	60s	--CAAAAC	60s	EFFEFBAAAC	077002	60s	---	70s	EF
				057004	50s	--FEE							
052002	50s	-----FLEE	60s	058001	60s	---FEF---C	70s	C	078004	70s	-F		
052005	60s	-----FEE	70s	058003	60s	FFFF							
052006	60s	-----FEE	70s						079002	50s	-----F	60s	EEEEFEFE
052008	60s	FEFEFEFE		059001	50s	FE	60s	FEFEFBACC	079003	70s	EF		
052014	60s	--FEE	70s	060001	50s	-----FE	60s	EEEEEBAC	079006	50s	---	60s	EEEEFEFE
										70s	EEF		
053004	50s	-----FE	60s	061002	60s	FEFEFBCC				60s	---	70s	EF
	70s	FEFEFEFAAA	80s						081003	60s	-----FE	70s	FF
		A											
054001	70s	CAAAAAAAAA	30s	062001	50s	-----F	60s	EEEEFEFE	082001	60s	--FEFEFE	70s	FF
	40s	AAAAAAAAAA	50s										
	60s	AAAAAAAAAA	70s	064001	60s	-----FF			084001	70s	FFFF		
054003	70s	EEEEFEFE	30s						084002	60s	-----FE	70s	EEEE
	40s	AAAAAAAAAA	50s	066002	60s	-----FEE	70s	FEE	084003	60s	-----FEE	70s	EEEE
	60s	AAAAAAAAAA	70s	066003	60s	---FEF	70s	FE	084004	50s	-----FEE	60s	EEEEFEFE
	80s	AAAA		066011	60s	-----CA	70s	AC		70s	FEFE		
054005	50s	-----FEE	60s						084005	50s	---	60s	EEEEFEFE
	70s	-----AA		067001	50s	---FEE	60s	EEEEFEFE		70s	FEFE		
054010	60s	--CC			70s	FEFE			084006	70s	FEFE		
054013	60s	-----CACA	70s	067002	50s	-----FEE	60s	EEEEFEFE	084008	70s	FEFE		
054014	60s	-----CAA	70s	067003	60s	-----FF	70s	FEFE	084007	60s	---	70s	FEFE
054017	60s	-----CC		067004	50s	-----FEE			084008	60s	-----FEE	70s	FEFE
				067006	60s	FEFEFEFE			084009	60s	-----FEE	70s	FEFE
055001	30s	-----FEE	40s	067007	60s	-----FEE			084011	60s	-----FEE	70s	FEFE
	50s	FFFEFEFE	60s	067015	70s	FEFE			084012	60s	-----FEE	70s	FEFE
	70s	EF		067017	60s	-----FEE	70s	FE	084013	60s	-----FEE	70s	FEFE
055002	30s	-----FEE	40s						084014	60s	-----FEE	70s	FEFE
	50s	EEEEFEFE	60s	068001	60s	-----FEE	70s	FE	084015	70s	FEFE		
	70s	AAAAAAAAAA	80s	068003	40s	-----F	50s	EEEEFEFE	084016	70s	FEFE		
055006	30s	FFFF	40s						084017	60s	---	70s	FEFE
	50s	EEEEFEFE	60s	068004	60s	FEFEFEFE	70s	FE	084018	60s	-----FEE	70s	FEFE
	70s	EEEEFEFE		068005	60s	FEFEFEFE	70s	FE	084019	60s	-----FEE	70s	FEFE
055007	30s	-----FEE	40s	068006	60s	FEFEFEFE			084020	70s	FFFF		
	50s	EEEEFEFE	60s						084021	70s	FEF		
	70s	AAAAAAAAAA	80s	069004	40s	-----FEE	50s	EEEEFEFE	084022	70s	---	70s	FEFE
055023	60s	-----F	70s		60s	FFFEFEFE			084023	70s	---	70s	FEFE
	80s	AAA							084024	70s	---	70s	FEFE
				070001	50s	-----FEE	60s	FEFEBAACC	084027	70s	---		
056001	50s	-----FEE	60s		70s	CC							
	70s	FEFEFEFE							085001	60s	-----FEE	70s	FEFE
056002	50s	---	60s	071001	60s	CC			085002	60s	-----FEE	70s	FEFE
	70s	EEEEFE		071002	60s	-----FBAAAA	70s	AAAA	085003	70s	FEFE		
	60s	-----FEE											
056003	60s	FFFF	70s	072001	60s	FEFEFBAAA	70s	CCAC	086001	70s	FFFF		
056004	60s	-----FEE	70s						086002	70s	FEFE		
056006	60s	FEFEFEFE		075001	60s	-----FEE							
056011	70s	FEFEFEFE		075002	60s	-----FEE							
056012	70s	FEFEFE							097002	70s	FFFF		

Produced 29th August 1985 New summaries available on request

GROUNDWATER LEVEL MEASUREMENT

A BRIEF HISTORY

Since Clutterbuck (1850) and Lucas (1877) showed that falls in groundwater level had taken place in the Chalk of the London Basin, local water engineers started to keep records of groundwater level in wells* constructed for supply. However, systematic measurement, first by manual measurement and later supplemented by the use of automatic continuous recorders, was started by the Geological Survey only in the 1950's. By 1963, systematic measurements of groundwater level were being made in 526 wells by local water undertakings, by private individuals and by the Geological Survey (Lovelock 1967). Eighty-one per cent of these observation wells were in the Chalk and Upper Greensand aquifer, and 6 per cent in the Permo-Triassic sandstones (these two aquifers are the most extensive and the most important in the United Kingdom).

Water resources, including groundwater resources, became a subject for national consideration under the Water Resources Act 1963. Each of the river authorities constituted by this Act was asked by the Water Resources Board to form a network of groundwater observation wells, either using existing shafts and boreholes, or constructing new wells for the purpose. By March 1974, of the 29 river authorities 20 had submitted complete or partial schemes for such networks, 6 had no significant groundwater resources and thus had no need for such networks, and only 3 had failed to put forward any scheme at all. At this time, 1393 known observation wells were in use, of which 212 were fitted with automatic groundwater level recorders. Fifty-five per cent of these sites were located in the Chalk and Upper Greensand aquifer, and 24 per cent in the Permo-Triassic sandstones.

The Water Act 1973 disbanded the existing river authorities and the Water Resources Board. Ten water authorities were created for England and Wales, together with the Water Data Unit which became responsible for maintaining a national archive of groundwater levels. By 1980, the number of operational observation wells approached 3000 (Anon 1984), of which 55 per cent were in the Chalk and Upper Greensand aquifer, and 17 per cent in the Permo-Triassic sandstones. The number of sites in other aquifers had increased markedly. The actual number of observation wells known to the Water Data Unit in 1980 in fact exceeded 4000, but many of these were either disused or measured only at very infrequent intervals.

Groundwater level observation wells are generally used for one of two purposes, either to monitor

levels regionally and thus to estimate groundwater resource fluctuations, or to monitor the effects locally of groundwater abstraction. The number of observation wells required in different areas varies widely. Over the last two decades, a target density was sought of one well to 25 to 35 km². During the last few years, it has become apparent in some districts that satisfactory information can be obtained with fewer wells, while in others the densities had to be substantially increased.

The observation well network was reviewed in 1981 by the Institute of Geological Science (now the British Geological Survey) with the aim of selecting 200 to 300 sites from the existing Water Data Unit archive, to be used for periodical assessments of the national groundwater situation. The selection was based upon hydrogeological units identified in an investigation of the groundwater resources of the United Kingdom (Monkhouse and Richards 1982); one site was chosen for each aquifer present within each unit. For Scotland and for Northern Ireland, this was not possible due to the very limited number of observation wells available. In England and Wales, the total number finally selected was 175 (Monkhouse and Murri 1981). Since that date, a number of changes have been made, and the register shown in this report lists 173 observation wells of which 50 per cent are in the Chalk and Upper Greensand aquifer and 21 per cent in the Permo-Triassic sandstones.

The Water Data Unit was officially disbanded in 1982 and the archive was taken over by the British Geological Survey. The archive comprised a series of paper files containing original data and a series of computer files; the latter have been transferred to an NERC computer. The present situation is that the computer archive holding data from the 173 selected wells is being updated and validated, this process being approximately 40 per cent completed (data for the selected wells are virtually complete to 1983 on the paper files). The remaining sites inherited from the Water Data Unit are held on a separate computer archive; the validation of this, the "historic archive", will be undertaken in the future, but the information is complete only to about 1977.

The maintenance and updating of a centralised database of groundwater levels is now limited to the 173 selected wells (apart from any variations and modifications that may become necessary). The responsibility for monitoring, and archiving data from, an adequate network of groundwater observation wells rests with the water authorities of England and Wales.

At the present time, no observation wells are monitored on a long term basis in Scotland. A few sites have been operated in Fife and around

* In this context, a well includes both shafts (constructed by hand-digging) and boreholes (constructed by machinery)

Dumfries, but the records are too short to have any great significance. There are no networks in operation in Northern Ireland but the Geological Survey measures levels in wells in the Permo-Triassic sandstones of the Lagan Valley, and sites in other areas and aquifers are being investigated.

In most observation wells, water levels are measured manually with an electrical dipper. Readings are usually taken at intervals of one week to one month, although some sites may be measured only twice yearly. The remaining sites are fitted with automatic continuous water level recorders of various types. The overall accuracy of measurement is generally between 5 and 10 mm.

References

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REGISTER OF SELECTED GROUNDWATER OBSERVATION WELLS

Scope

The listed sites were selected so as to give a reasonably representative cover for aquifers throughout England and Wales. The wells are grouped according to the aquifers to which the water level variations in the wells are attributed. A generalised list of aquifers is given in Table 4. While the aquifers are tabulated in stratigraphical order, most of the local names for individual strata are omitted and the intervening aquicludes are not shown.

The five columns of the register are:

Well Number

The well numbering system is based on the National Grid. Each 100 km square is designated by prefix characters, e.g. SE, and is divided into 100 squares of 10 km sides designated by numbers 00 to 99. Thus, the first site given in the register, SE93/4, is located in the 10 km square SE93, while the number after the solidus denotes that the site is the fourth accessed in this square. A suffix such as A, B, etc., defines the particular well when there are several at the same site.

Two asterisks following the Well Number indicates an index well for which hydrographs are shown on pages 155 to 160. The location of the index wells and the outcrop areas of the principal aquifers are shown in Fig. 9.

Grid Reference

The six or eight figure references given in the register relate to the 100 km National Grid square designated by the prefix characters in the Well Number. The distribution of the 100 km squares of the National Grid is shown on Fig. 10.

Site

The name by which the well or borehole is normally referenced.

The location of all the sites listed in the register are shown on Fig. 10.

Water Authority

An abbreviation referencing the water authority responsible for the groundwater level measurement. A full list of water authority codes together with the corresponding names and addresses appears on pages 166 and 167.

Records Commence

The first year for which records are held on the groundwater archive.

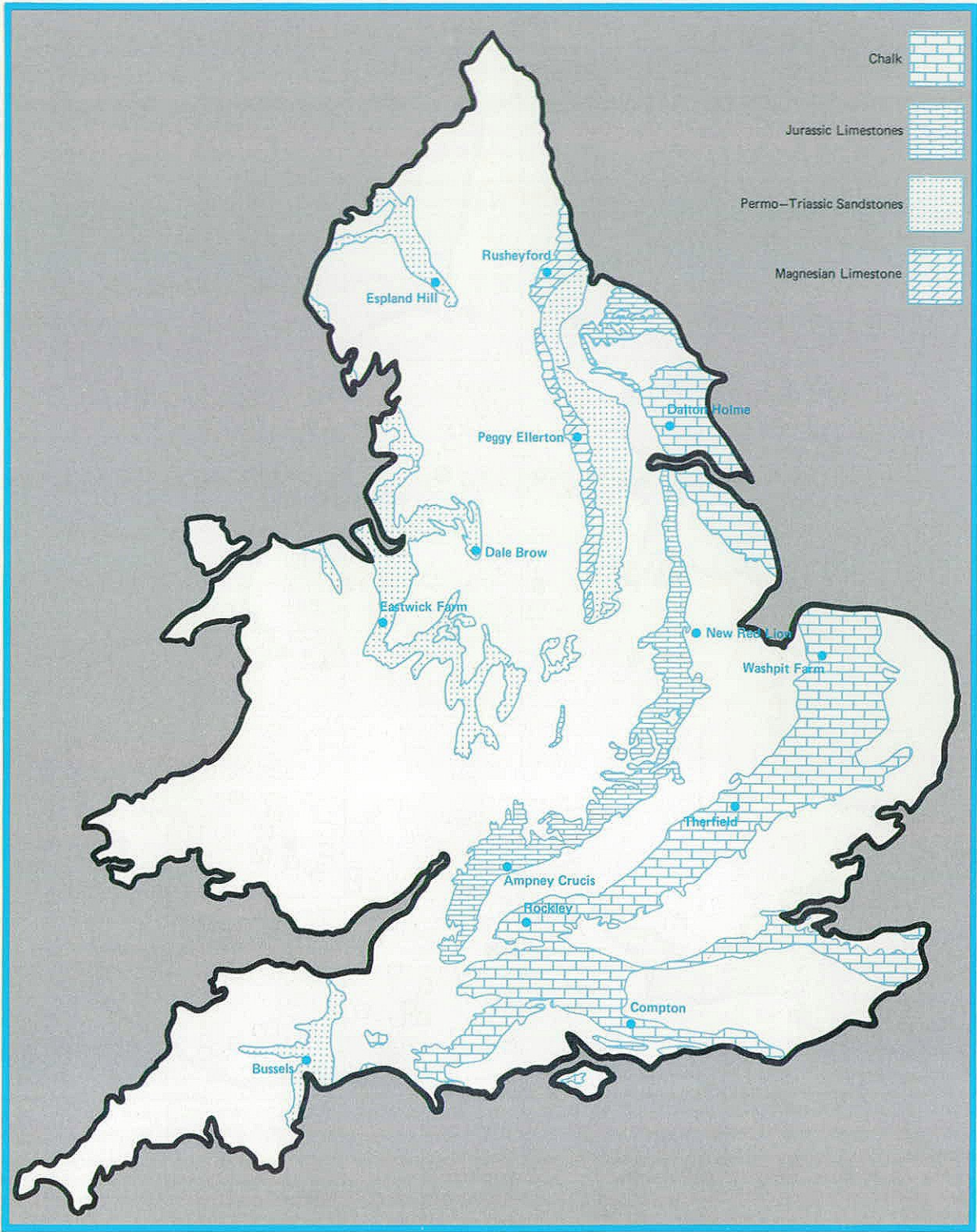


Figure 9. Principal aquifers and index borehole locations.

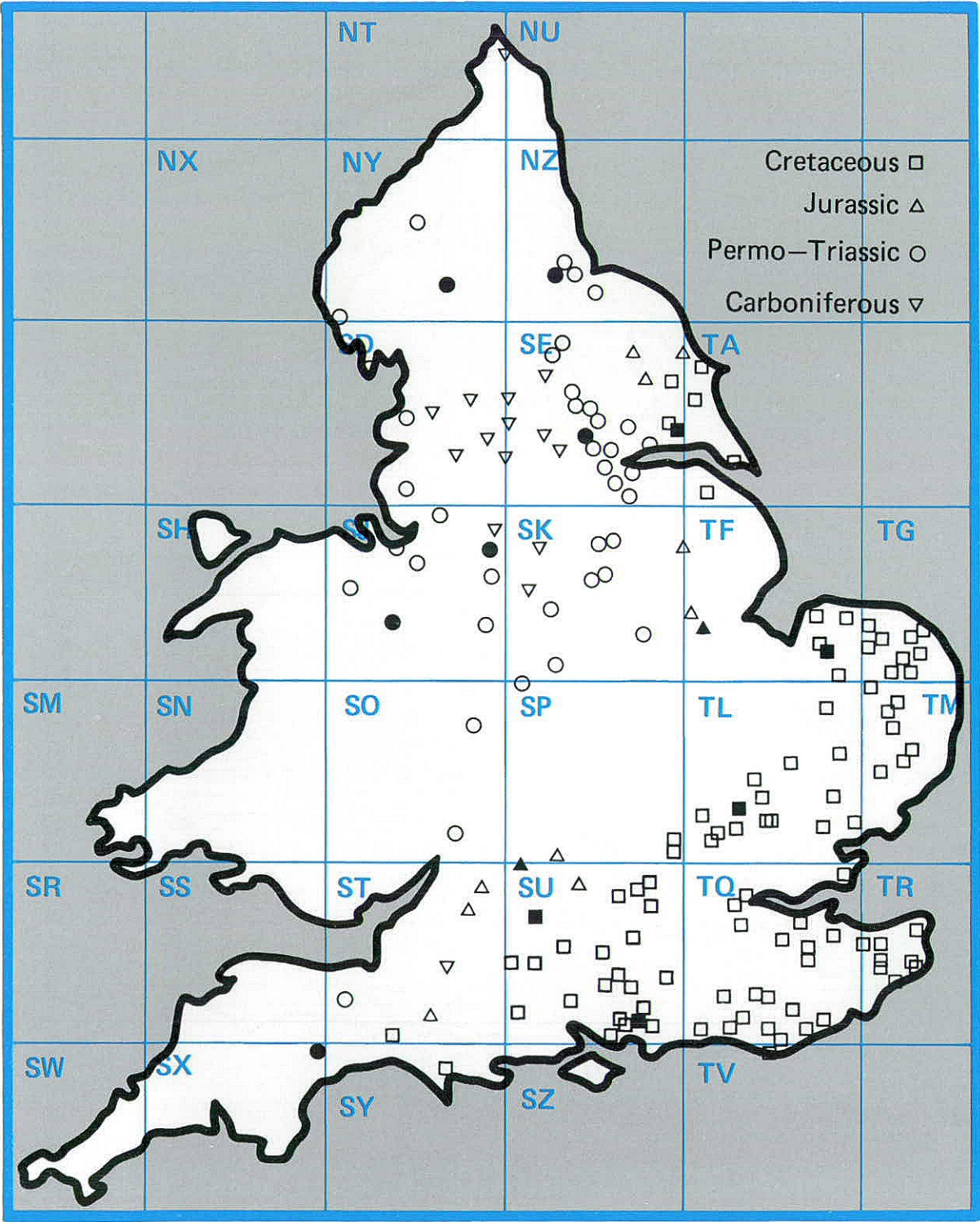


Figure 10. The representative borehole network in England and Wales.

TABLE 4. GENERALISED LIST OF AQUIFERS IN THE UNITED KINGDOM

Era	System	Subsystem	Aquifer	Importance	
CAINOZOIC	Quaternary	Holocene	Superficial deposits	*	
		Pleistocene	Upper and Middle Pleistocene Crag	* **	
	Tertiary	Pliocene	Coralline Crag	**	
		Oligocene			
		Eocene	Bagshot Beds		
			Lower London Tertiaries Blackheath & Oldhaven Beds Woolwich & Reading Beds Thanet Beds	**	
	Cretaceous	Upper Cretaceous	Chalk and Upper Greensand	****	
		Lower Cretaceous	Lower Greensand	***	
			Hastings Beds	**	
	Jurassic	Upper Jurassic	Portland & Purbeck Beds (Spilsby Sandstone)	* (**)	
		Corallian	**		
Middle Jurassic		Great & Inferior Oolitic limestones (Lincolnshire Limestone)	** (****)		
Lower Jurassic		Bridport & Yeovil Sands	**		
		Marlstone Rock			
MESOZOIC	Triassic	Keuper			
		Bunter			
	Permian	sandstones	Permo-Triassic sandstones		
			Magnesian Limestone	***	
	Carboniferous	Upper Carboniferous	Coal Measures	**	
			Millstone Grit	**	
		Lower Carboniferous	Carboniferous Limestone	**	
	Devonian		Old Red Sandstone	*	
	UPPER PALAEOZOIC				

Key to aquifer importance:

- * aquifer of minor importance only
- ** aquifer producing small, but useful, local supplies
- *** aquifer of local importance, often providing public supplies
- **** aquifer of major importance

Well Number	Grid Reference	Site	Water Authority	Records Commence
Aquifer : Chalk and Upper Greensand				
SE93/4	9212 3634	Dale Plantation	YWA	1970
SE94/5**	9651 4530	Dalton Holme	YWA	1889
SE97/31	9345 7079	Green Lane	YWA	1972
SP90/26	9470 0875	Champneys	TWA	1962
SP91/59	9380 1570	Pitstone Green Farm	AWA	1970
ST30/7	3763 0667	Lime Kiln Way	SWWA	1969
SUO1/5 B	0160 1946	Woodyates	WWA	1942
SUO4/2	0310 4883	Tilshead	WWA	1966
SU14/1	1690 4840	Netheravon	WWA	1968
SU15/57**	1655 7174	Rockley	TWA	1933
SU32/3	3816 2745	Bailey's Down Farm	SWA	1963
SU35/14	3318 5647	Woodside	SWA	1963
SU51/10	5877 1654	Hill Place Farm	SWA	1965
SU53/94	5589 3497	Abbotstone	SWA	1976
SU57/159	5628 7530	Calversleys Farm	TWA	1973
SU61/28 B	6474 1772	West End House	SWA	1953
SU61/46	6892 1524	Hinton Manor	SWA	1953
SU64/28	6360 4048	Lower Wield Farm	SWA	1961
SU68/49	6442 8525	Well Place Farm	TWA	1976
SU71/23**	7755 1490	Compton House	SWA	1893
SU73/8	7048 3491	Faringdon Station	TWA	1961
SU76/46	7367 6251	Riseley Mill	TWA	1975
SU78/45 A	7419 8924	Stonor Park	TWA	1961
SU81/1	8356 1440	Chilgrove House	SWA	1836
SU87/1	8336 7885	Farm Cottage, Coldharbour	TWA	1950
SU89/7	8103 9417	Piddington	TWA	1966
SY68/34	662 881	Ashton Farm	WWA	1977
TA06/16	0490 6120	Nafferton	YWA	1964
TA07/28	0940 7740	Hunmanby Hall	YWA	1976
TA10/40	1375 0885	Little Brocklesby	AWA	1926
TA21/14	2670 1890	Church Farm	YWA	1971
TF72/11	7710 2330	Off Farm	AWA	1971
TF74/1 A	7541 4087	Choseley Farm	AWA	1950
TF80/33	8738 0526	Houghton Common	AWA	1971
TF81/2 A**	8138 1960	Washpit Farm	AWA	1950
TF94/1	9160 4135	Cuckoo Lodge	AWA	1952
TGOO/92	0440 0020	High Elm Farm, Deopham	AWA	1971
TG02/3	0317 2476	Main Street, Foulsham	AWA	1952
TGO3/25 B	0382 3583	The Hall, Brinton	AWA	1952
TG11/5	1691 1101	The Spinney, Costessey	AWA	1952
TG12/7	1126 2722	Heydon Pumping Station	AWA	1974
TG21/9	2400 1657	Frettenham Depot	AWA	1952
TG21/10	2699 1140	Grange Farm	AWA	1952
TG23/21	2932 3101	Melbourne House	AWA	1974
TG32/67	3390 2020	School Road	AWA	1975
TG33/14	3428 3348	Eden Hall	AWA	1961
TL11/4	1560 1555	Mackerye End House	TWA	1960
TL11/9	1692 1965	The Holt	TWA	1964
TL13/24	1200 3026	West Hitchin	AWA	1970
TL22/10	2978 2433	Box Hall	TWA	1964
TL33/4**	3330 3720	Therfield Rectory	TWA	1883
TL42/6	4536 2676	Hixham Hall	TWA	1964
TL42/8	4669 2955	Berden Hall	TWA	1964
TL44/12	4522 4182	Redlands Hall	AWA	1964
TL66/2	6191 6013	Hall Farm	AWA	1964

TL72/54	7982 2516	Rectory Road	AWA	1968
TL84/6	8465 4106	Smeetham Hall Cottages, Bulmer	AWA	1963
TL86/110	8850 6470	Cattishall Farm	AWA	1969
TL89/37	8131 9001	Grimes Graves	AWA	1971
TL92/1	9657 2562	Lexden Pumping Station	AWA	1961
TM17/1	1671 7903	Old Parsonage House	AWA	1952
TM15/112	1201 5618	Dial Farm	AWA	1968
TM18/2	1983 8600	Pulham Market	AWA	1952
TM19/2	1810 9270	Hill Farm	AWA	1952
TM26/46	2461 6109	Fairfields	AWA	1974
TM26/95	2786 6397	Strawberry Hill	AWA	1974
TQ01/133	0850 1170	Chantry Post, Sullington	SWA	1977
TQ21/11	2850 1289	Old Rectory, Pyecombe	SWA	1958
TQ28/119 B	2996 8051	Trafalgar Square	TWA	1845
TQ31/50	3220 1180	North Bottom	SWA	1979
TQ35/5	3363 5924	Rose & Crown	TWA	1876
TQ38/9 A	3509 8536	Hackney Public Baths	TWA	1953
TQ50/7	5592 0380	Old Rectory, Folkington	SWA	1965
TQ56/19	5648 6124	West Kingsdown	TWA	1961
TQ57/118	5880 7943	Thurrock A13	AWA	1979
TQ58/2 B	5622 8408	Bush Pit Farm	TWA	1967
TQ66/48	6649 6873	Owlets	SWA	1968
TQ86/55	8528 6185	Stockbury Valley	SWA	1963
TQ99/11	947 971	Burnham	AWA	1975
TRO5/6	0239 5995	Step Cottage	SWA	1970
TR14/42	1065 4395	Kingsmill Down	SWA	1971
TR15/58	1281 5148	Cotterell Court	SWA	1970
TR24/13	2880 4937	Eythorne Green	SWA	1953
TR34/81	3173 4725	Church Farm	SWA	1971
TR36/62	3208 6634	Alland Grange	SWA	1969
TV59/7 C	5290 9920	Westdean 3	SWA	1904

Aquifer : Lower Greensand

SU72/47	7697 2414	Westmark Farm	SWA	1970
SU84/8 A	8716 4087	Tilford Pumping Station	TWA	1971
TL45/19	4110 5204	River Farm	AWA	1973
TQ41/79	4714 1271	Southover	SWA	1970
TQ75/72	7038 5218	Marshall Cottages	SWA	1969
TQ75/86	7135 5652	Kiln Barn Farm	SWA	1973
TR13/21	1132 3881	Ashley House	SWA	1972
TR23/32	2075 3650	Morehall Depot	SWA	1972

Aquifer : Hastings Beds

TQ22/1	2348 2770	The Bungalow	SWA	1964
TQ42/10	4684 2794	Greystones	SWA	1966
TQ43/16	4245 3145	Garde Wych Cross	SWA	1973
TQ61/47	6894 1389	Old Kennels	SWA	1966
TQ62/89	6282 2348	Rose Lodge	SWA	1973
TQ71/123	7969 1659	Red House	SWA	1974

Aquifer : Upper Jurassic

SE68/16	6890 8590	Kirkbymoorside	YWA	1973
SE77/76	7690 7300	Broughton	YWA	1975
SE98/8	9910 8540	Seavegate Farm	YWA	1971
SU49/40 B	4117 9307	East Hannev	TWA	1978

Aquifer : Middle Jurassic

(excluding the Lincolnshire Limestone)

SPOO/62**	0595 0190	Ampney Crucis	TWA	1958
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SP20/113	2721 0634	Alvescot Road	TWA	1975
ST51/57	591 169	Over Compton	WWA	1971
ST77/8	7834 7682	Tormartin 1	WWA	1973
ST89/32	8642 9030	Westonbirt School	WWA	1932

Aquifer : Lincolnshire Limestone

SK97/25	9800 7817	Grange de Lings	AWA	1975
TFO3/37**	0885 3034	New Red Lion	AWA	1964
TFO4/14	0429 4273	Silk Willoughby	AWA	1972

Aquifer : Permo-Triassic sandstones

NY00/328	0511 0247	Browbank Layby	NWWA	1974
NY45/16	4947 5667	Corby Hill	NWWA	1977
NY62/4**	6883 2301	Espland Hill	NWWA	1976
NZ41/34	4861 1835	Northern Dairies	NWA	1974
SD27/8	2172 7171	Furness Abbey	NWWA	1972
SD41/32	4400 1164	Yew Tree Farm	NWWA	1971
SD44/15	4396 4928	Moss Edge Farm	NWWA	1961
SE36/9	3590 6480	Newfield Farm	YWA	1968
SE39/20 B	3004 9244	Scruton Village	YWA	1969
SE44/4 B	4880 4850	Healaugh Pumping Station	YWA	1968
SE45/3	4470 5580	Cattal Maltings	YWA	1969
SE52/4	5473 2363	Southfield Lane	YWA	1955
SE55/4	5829 5383	Clifton Hospital	YWA	1967
SE60/24	6784 0709	Woodhouse Grange	STWA	1980
SE64/1	6751 4463	Wheldrake Station	YWA	1971
SE72/3 B	7047 2149	Rawcliffe Bridge	YWA	1971
SE83/9	8040 3640	Holme-on-Spalding Moor	YWA	1972
SJ15/15	1374 5556	Oaklands Bridge	WELSH	1972
SJ33/39**	3814 3831	Eastwick Farm	WELSH	1974
SJ37/2 H	3805 7676	Bowater 6	NWWA	1971
SJ56/45 E	5042 6953	Ashton 4	NWWA	1969
SJ69/138	6311 9620	Kenyon Lane	NWWA	1968
SJ83/1 A	8969 3474	Stone	STWA	1974
SJ87/32**	8969 7598	Dale Brow	NWWA	1973
SJ96/41	9310 6301	Rushton Spencer 1	NWWA	1969
SK00/41	067 012	Nuttall's Farm	STWA	1974
SK21/111	2731 1419	Grange Wood	STWA	1967
SK24/22	2539 4431	Burtonshuts Farm	STWA	1972
SK56/53	5632 6440	Peafield Lane	STWA	1969
SK68/21	6100 8374	Crossley Hill Wood	STWA	1970
SK73/50	7693 3228	Woodland Farm	STWA	1980
SO71/18	7170 1970	Stores Cottage	STWA	1973
S087/28	8160 7970	Hillfields	STWA	1961
ST12/48	108 267	Milverton Bypass	WWA	1972
SX99/37 B**	9528 9872	Bussels 7A	SWWA	1972
SY09/21 A	0666 9235	Heathlands	SWWA	1951

Aquifer : Magnesian Limestone

NZ22/22**	2875 2896	Rusheyford NE	NWA	1967
NZ32/1 B	3780 2983	Butterwick	NWA	1967
NZ33/20	3349 3501	Garmondsway	NWA	1974
SE28/28	2460 8520	Bedale	YWA	1972
SE35/4	3830 5830	Castle Farm	YWA	1970
SE43/9**	4535 3964	Peggy Ellerton Farm	YWA	1968
SE43/14	4660 3550	Coldhill Farm 35	YWA	1971
SE51/2	5210 1530	Westfield Farm	YWA	1971
SK46/71	4800 6030	Stanton Hill	STWA	1973
SK58/43	5248 8018	Southheads Lane	STWA	1973

Aquifer : Coal Measures

SD62/35	6925 2945	Lion Brewery	NWWA	1974
SE23/4	2850 3414	Silver Blades Ice Rink	YWA	1971
SJ98/6	9394 8950	Chadkirk Marple	NWWA	1982

Aquifer : Millstone Grit

SD55/5	5820 5350	Abbeystead	NWWA	1972
SD75/6	7826 5962	Hersley Farm	NWWA	1973
SD83/111	8803 3949	Red Scar Mill	NWWA	1974
SD92/8	9833 2660	Horsehold Farm	YWA	1971
SEO4/7	0295 4792	Lower Heights Farm	YWA	1971
SE24/2 B	2067 4053	Green Lane Dyeworks	YWA	1971
SE27/8	2120 7380	Kirkby Moor Farm	YWA	1971

Aquifer : Carboniferous Limestone

NT95/21	9695 5055	Middle Ord	NWA	1974
SEO6/1	0241 6183	Jerry Laithe Farm	YWA	1971
SK15/16	1292 5547	Alstonfield	STWA	1974
SK17/13	1778 7762	Hucklow South	STWA	1969
ST64/36	6610 4460	Waterlip Quarry	WWA	1975

THE GROUNDWATER SITUATION IN THE UNITED KINGDOM UP TO THE END OF 1981

Background

Groundwater may be obtained from almost any stratum in the sedimentary succession in the British Isles, as well as from metamorphic and igneous rocks. In many rocks, such as clays and shales, volcanics and metamorphics, the permeable zone from which water may be obtained can well be limited to the depth to which weathering may reach, and this is unlikely to be more than some 50 metres beneath the ground surface. In those strata which are not generally recognised to be aquifers, well-yields tend to be small (of the order of only a few cubic metres per day), uncertain as a continuous source (tending to fail in prolonged droughts), with an indifferent groundwater quality, and with the sources vulnerable to pollution.

The more generally recognised aquifers are listed in Table 4, with the Chalk and Upper Greensand, the Lincolnshire Limestone and the Permo-Triassic sandstones as the most important for public water supply. From such aquifers as these, yields of 3000 to 4500 cubic metres a day are not unusual. For the next category, including the Lower Greensand and the Magnesian Limestone, yields from individual wells of 1500 to 3000 cubic metres a day can generally be expected. In the other aquifers, while occasional sources sufficient for large supplies may be developed, they tend to be important only locally.

The groundwater resources of an aquifer are naturally replenished from rainfall. During the summer months, when the potential evaporation is high and soil moisture deficits are appreciable, little infiltration takes place. There is a notable exception to this rule in the Eden valley of Cumbria where, enclosed between the massifs of Cross Fell and the Lake District, sufficiently heavy and continuous summer rainfall occurs to maintain infiltration through part at least of most summers. The normal recharge of an aquifer takes place during the winter months when the potential evaporation is low and soil moisture deficits are negligible.

There are few artificial reservoirs in the United Kingdom which are sufficiently large to support demands through the driest summers, assuming that they were full at the start of the summer, without some continuous contribution from river intakes. Prolonged dry spells lead to reduced flow in many rivers, particularly where the natural groundwater contribution (baseflow) is limited. Consequently, while surface water droughts may in part be due to the failure of runoff from winter

rainfall to fill the reservoirs, they are more frequently caused by a decrease in the summer flows of streams and rivers. Surface water droughts do, however, lead to increased consumption of groundwater (where available).

Groundwater droughts manifest themselves by falling water levels in the aquifers, resulting from a lack of winter rainfall and hence reduced infiltration. The exceptional drought of 1975-76 became severe only after the remarkably dry winter when, within England and Wales, negligible recharge to aquifers occurred. By the spring of 1976, when seasonal underground storage should have been at its peak, aquifer storage was already at a very low level. Since, however, groundwater levels in aquifers are controlled by local and variable base level drainage conditions, the extent to which further falls in level could occur under natural unconfined conditions was limited so that by the autumn of 1976 levels were lower than those previously recorded by no more than a few metres. Under confined conditions, falls in excess of 10 metres occurred below the previously recorded minima. Nevertheless, the volume of groundwater in storage, particularly in the larger aquifers, is very great compared with the mean annual replenishment, and is, therefore, capable of cushioning the effects of even the most severe droughts. Even in the late summer of 1976, although many shallow shafts and boreholes dried out as the water levels fell, the yields from the deeper wells were easily maintained.

The groundwater situation 1978-81

The volume of groundwater stored in aquifers reflects not only the infiltration taking place during the previous winter months, but also that occurring in previous years. It is therefore unsafe to consider any single year in isolation. In this present publication the 1981 groundwater situation is considered within the context of the rainfall pattern and groundwater level variations over the period 1978-81.

Table 5 shows the winter and summer rainfall for England, Wales, Scotland and Northern Ireland for the years 1978-81. Although summer rainfalls were in general a little below average, winter rainfalls were almost invariably above average for this period. Groundwater levels reflected this situation, being generally near to, or above, average throughout the period. Hydrographs for a number of index wells are presented in Fig. 11. The trace of

observed water levels upon the hydrographs is discontinued where there is a break between successive measurements of more than 8 weeks. Each hydrograph shows monthly maxima, minima and mean levels where the period of record covers 10 or more years prior to 1981. For shorter records, only the hydrograph constructed from observed levels is shown. Some sharp falls in late 1978 and early 1979 seen at Dale Brow and Espland Hill in northern England and also in some of the Chalk wells in the south appear to be due, in part, to a dry start to the winter and in part to modifications to the local groundwater abstraction regime. The site at Therfield Rectory is of particular interest as an example of a hydrograph that reaches peak and low values some three months after the corresponding peaks and lows of the rainfall. This lagged response is a result of the time required for the infiltrate to reach the saturated zone.

From the groundwater standpoint, 1981 appears to have been a near average year in England and Wales, with the groundwater levels near to, or above, average. Only at Dalton Holme in the Chalk of Yorkshire were groundwater levels below aver-

age at the end of the year, and even then they were rising.

At Rusheyford North East, records commence in 1967, and yet in 1980-81 the observed levels are close to the recorded maxima despite the near-average infiltration that occurred in this period. The reason lies largely in an alteration in the pumping regime of an adjacent public supply source, but it does emphasise the necessity of long-term records for estimating mean values.

In Scotland, there are few operational groundwater observation wells, and those that there are have records covering a period of three years or less. Judging by the levels observed during 1981 at Easter Lathrisk [NO 2837 0802], the year was close to average, and this accords with the rainfall figures of Table 5.

In Northern Ireland, the only site with any length of record (from 1974) is Lisburn No.5 [IJ 2490 6880] located in the Permo-Triassic sandstones of the Lagan Valley. The maximum range of water level fluctuation through the period of record is only of the order of one metre. During 1981, levels remained at, or close to, the average.

TABLE 5. WINTER AND SUMMER RAINFALL FOR THE YEARS 1978 TO 1981 AS A PERCENTAGE OF THE 1941-1970 AVERAGE.

	Winter rainfall				Summer rainfall			
	1977-78	1978-79	1979-80	1980-81	1978	1979	1980	1981
England	112	111	124	130	90	92	96	104
Wales	92	98	131	120	83	61	85	96
Scotland	116	102	114	125	83	98	98	92
Northern Ireland	112	104	132	117	73	94	88	109

Winter months include October to March, summer months April to September.

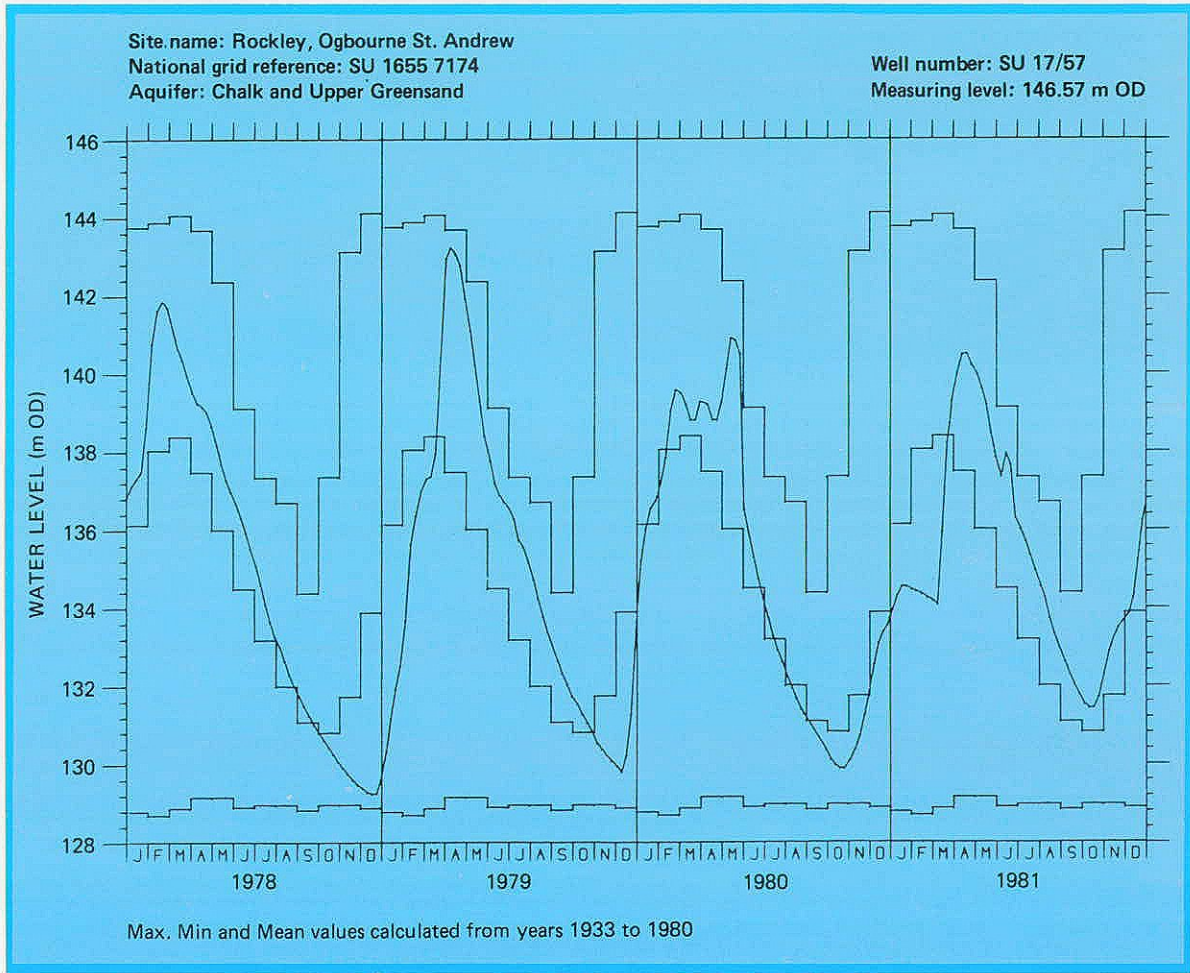
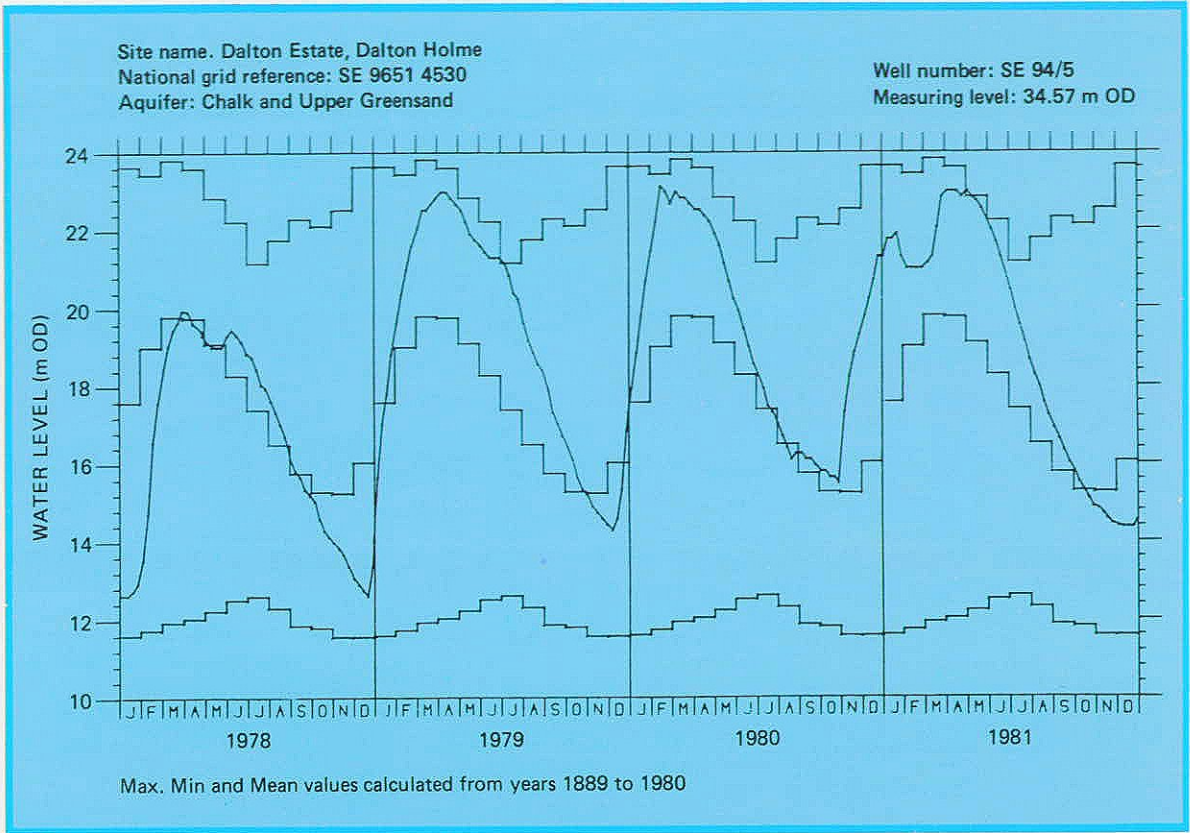


Figure 11. Hydrographs of groundwater level fluctuations 1978–81.

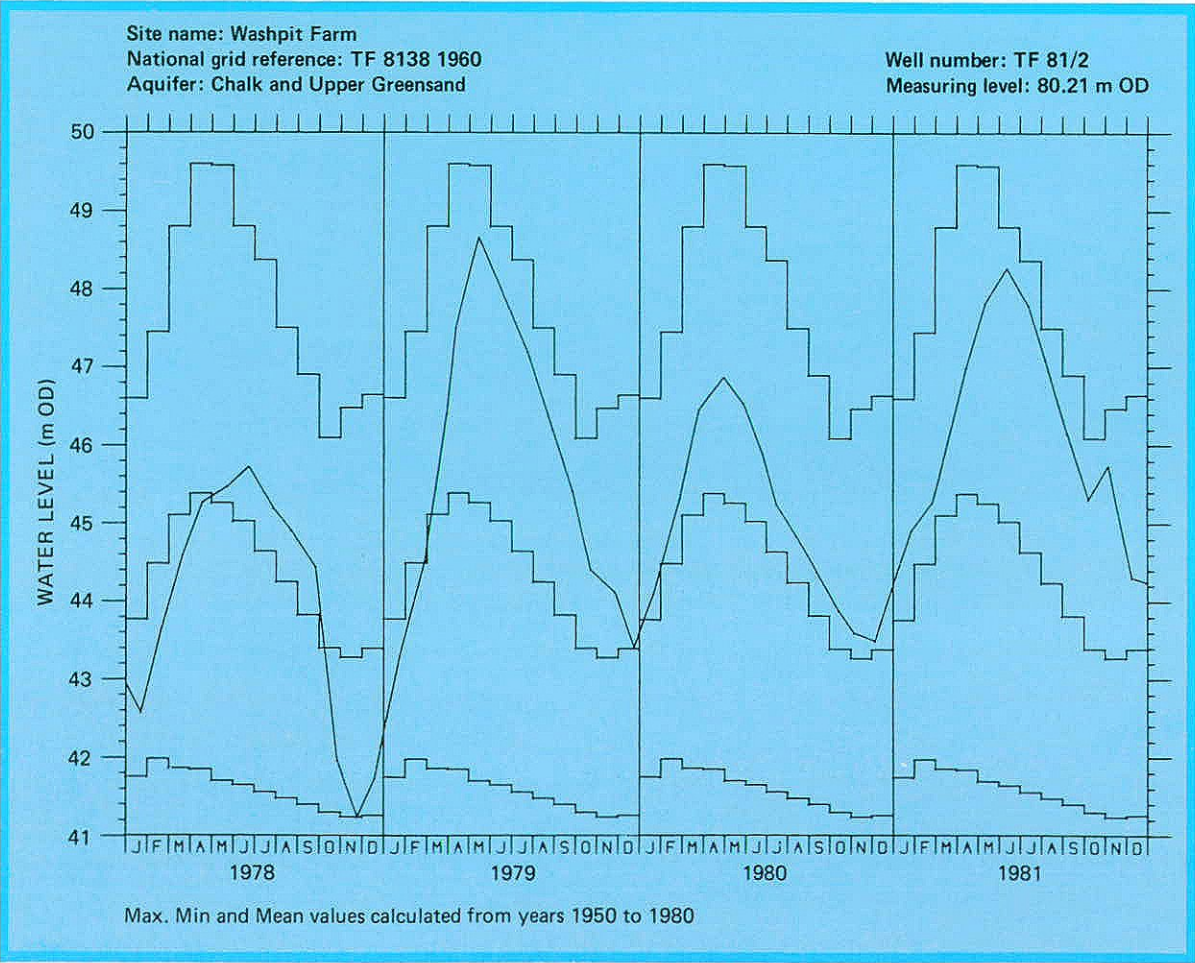
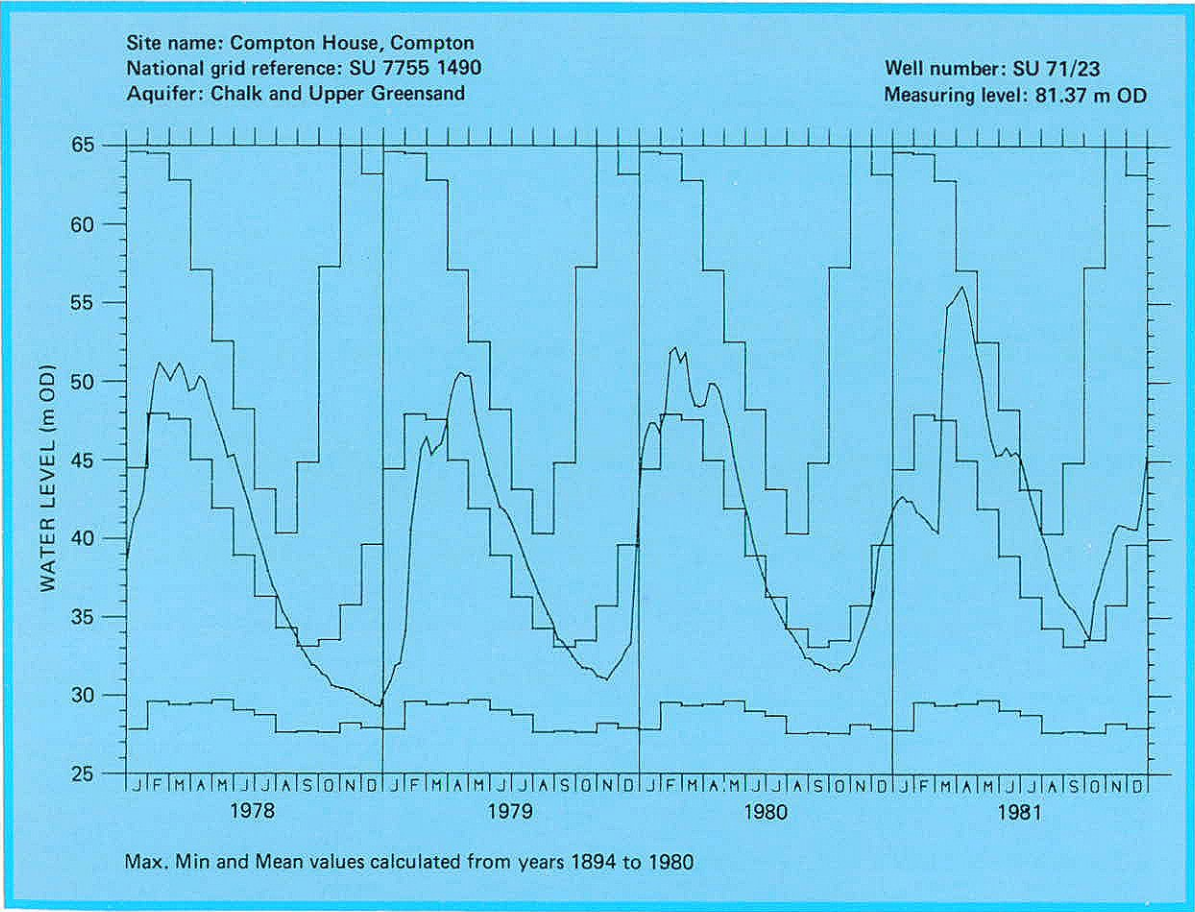


Figure 11—(continued).

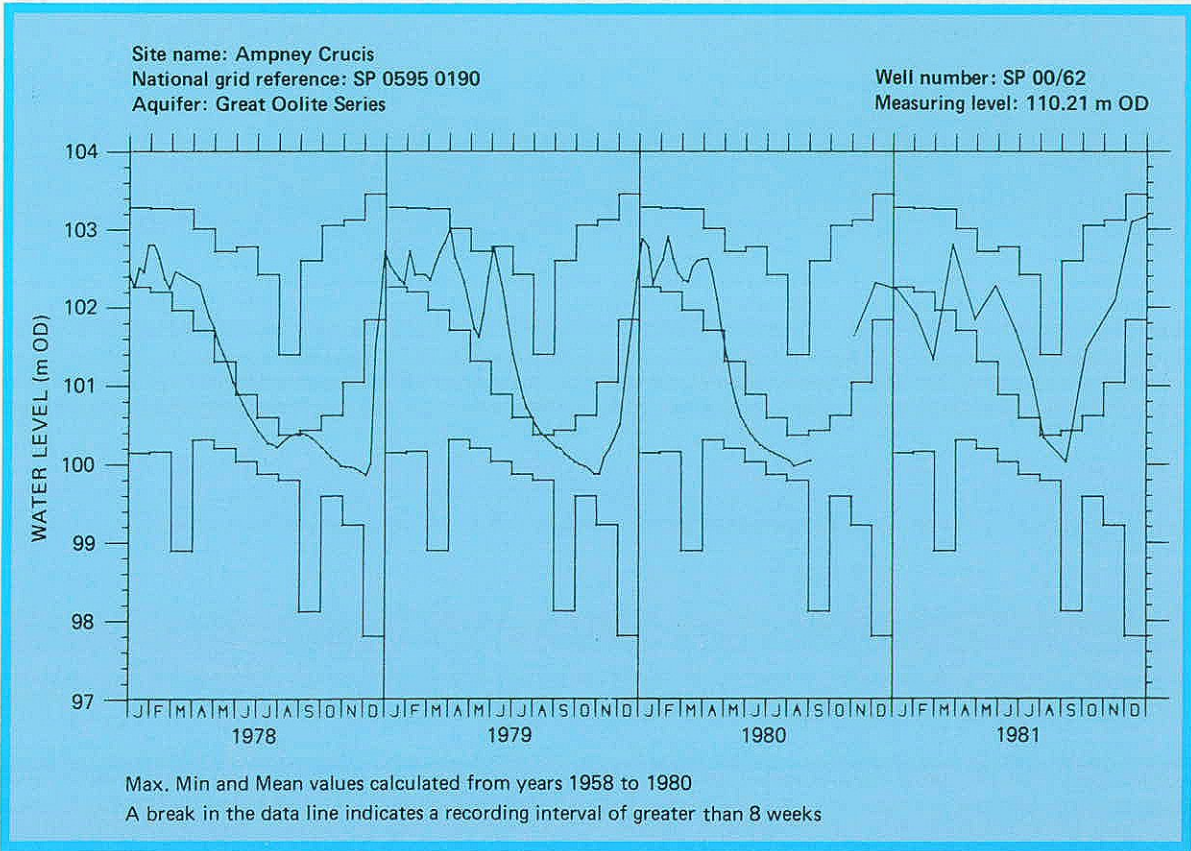
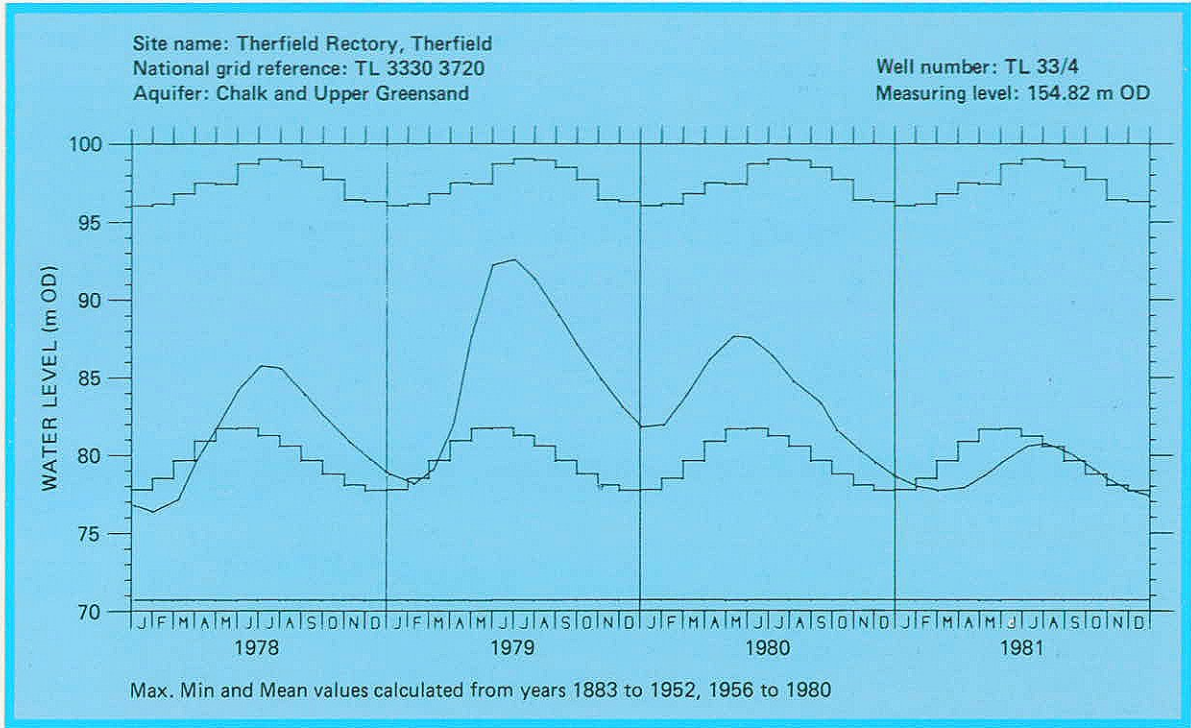


Figure 11—(continued).

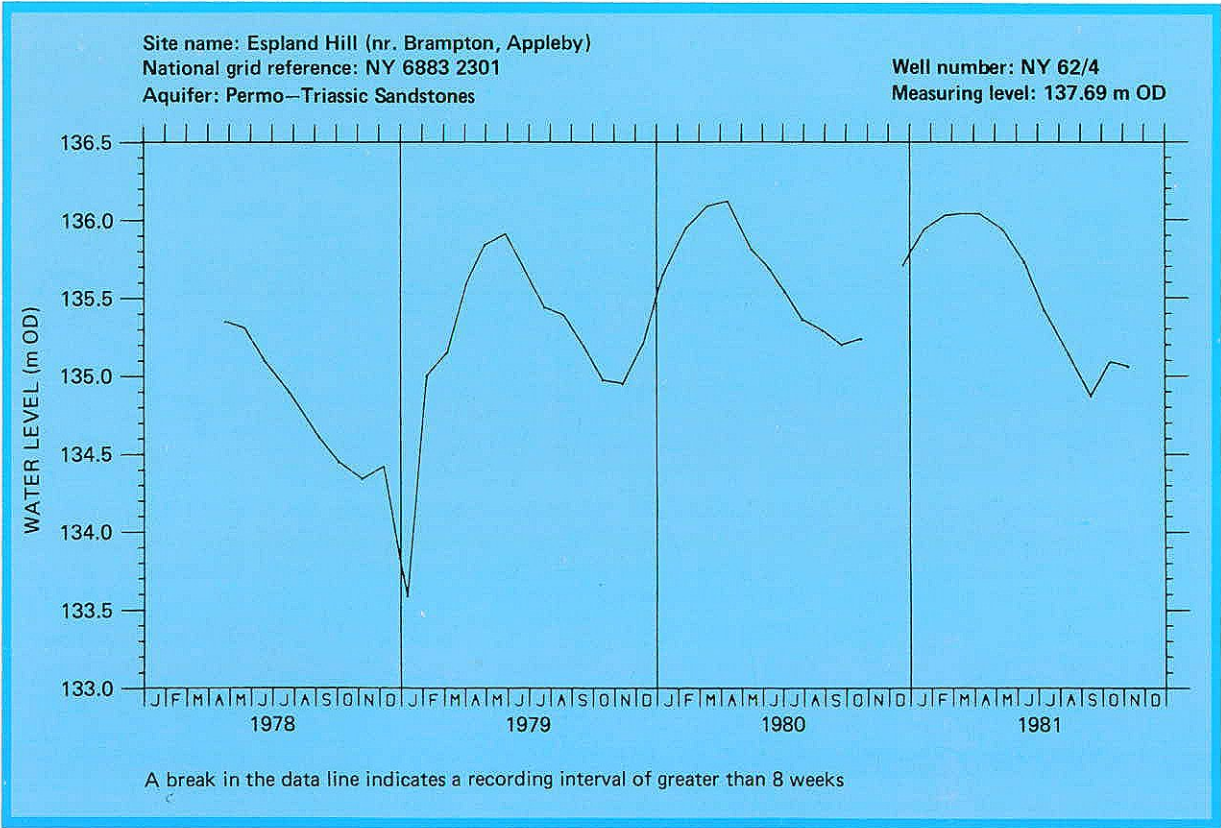
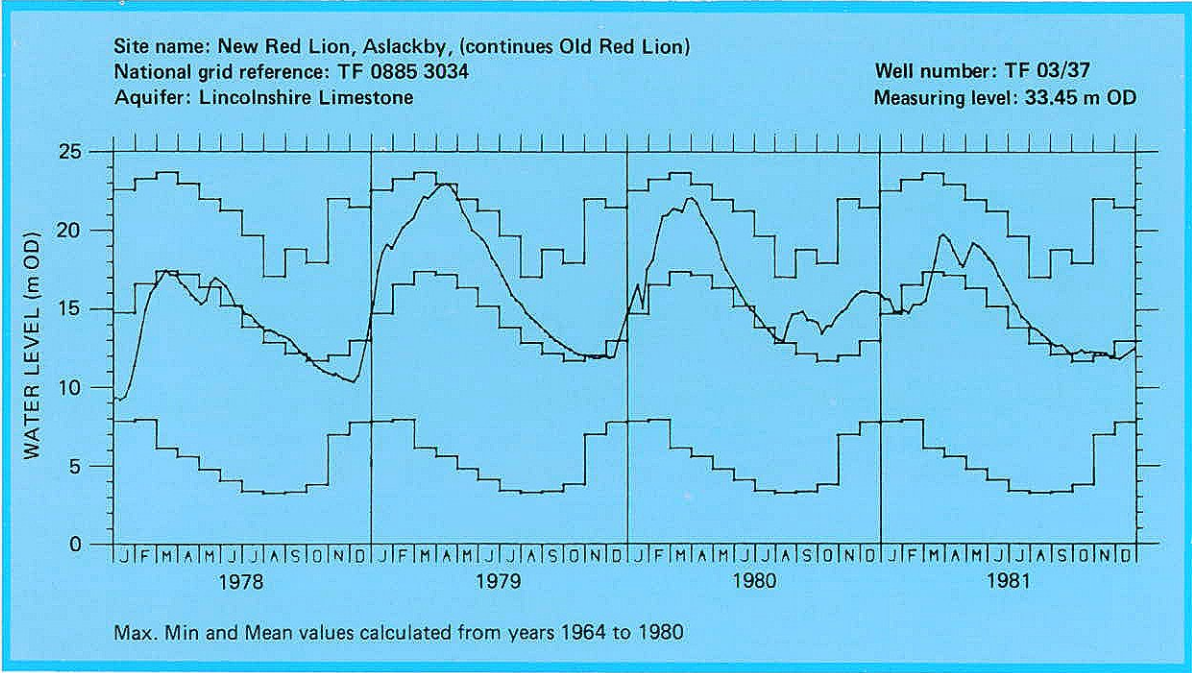


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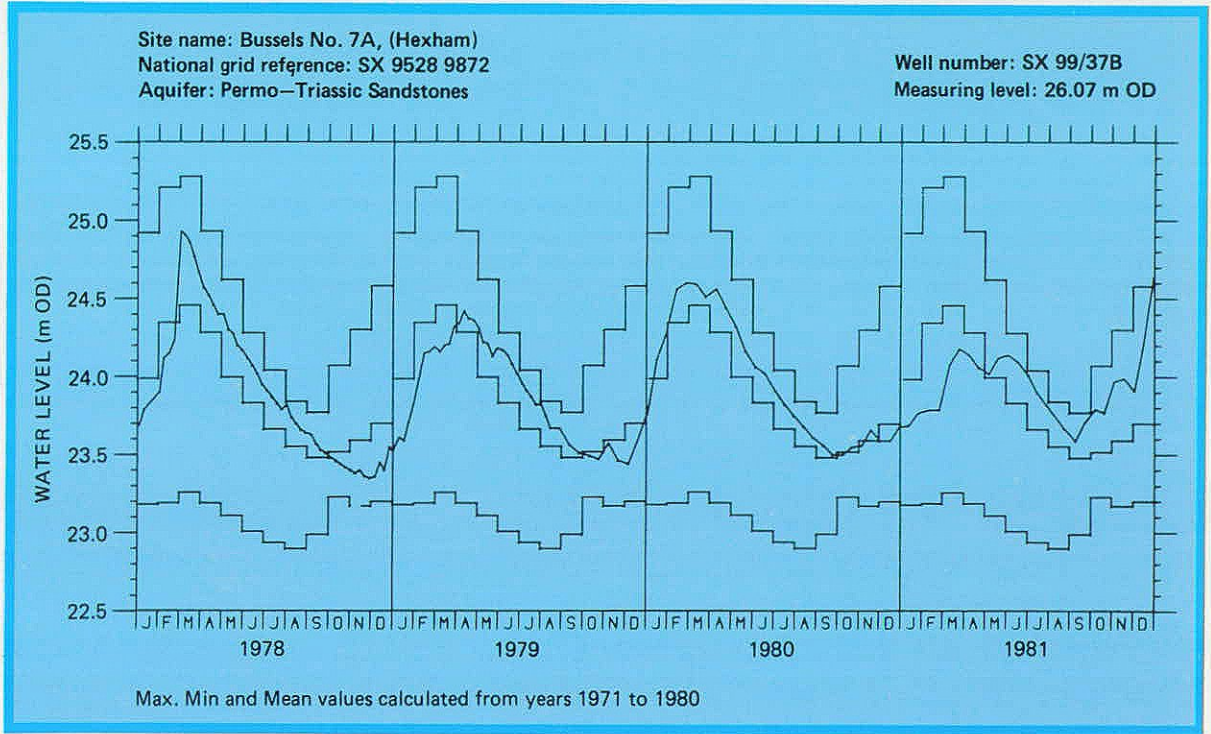
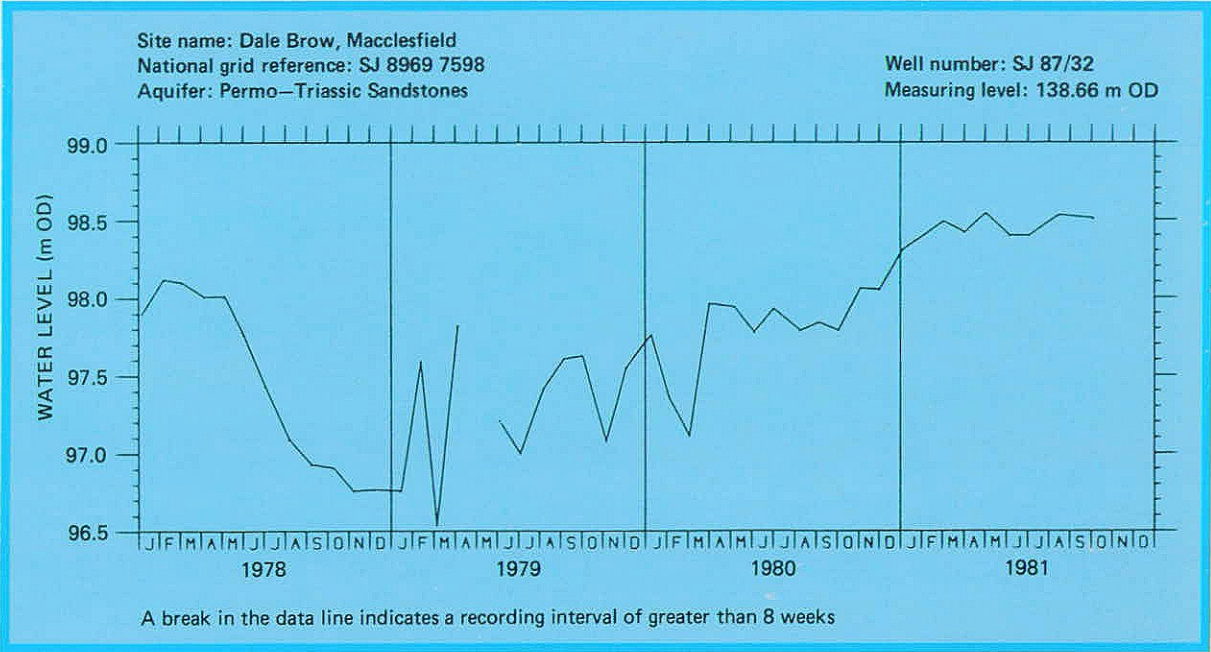
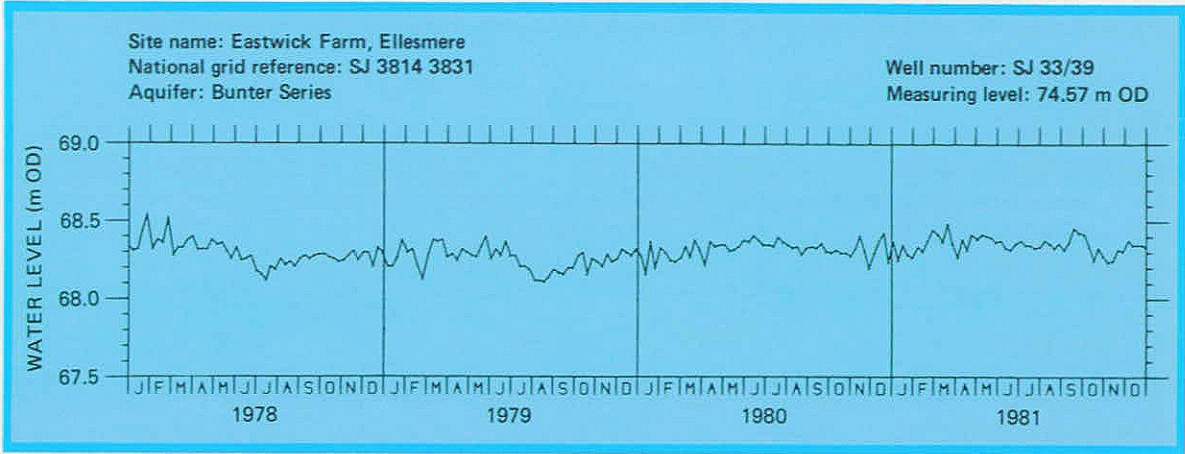


Figure 11—(continued).

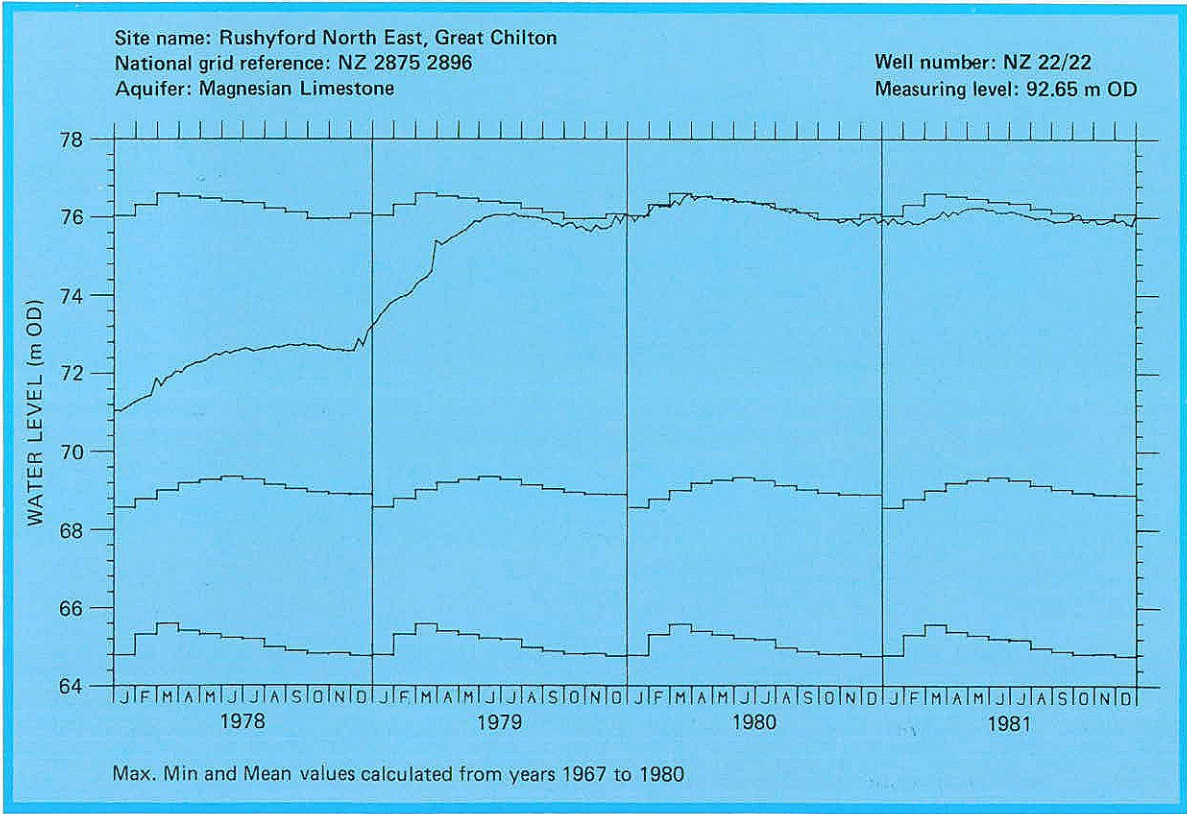
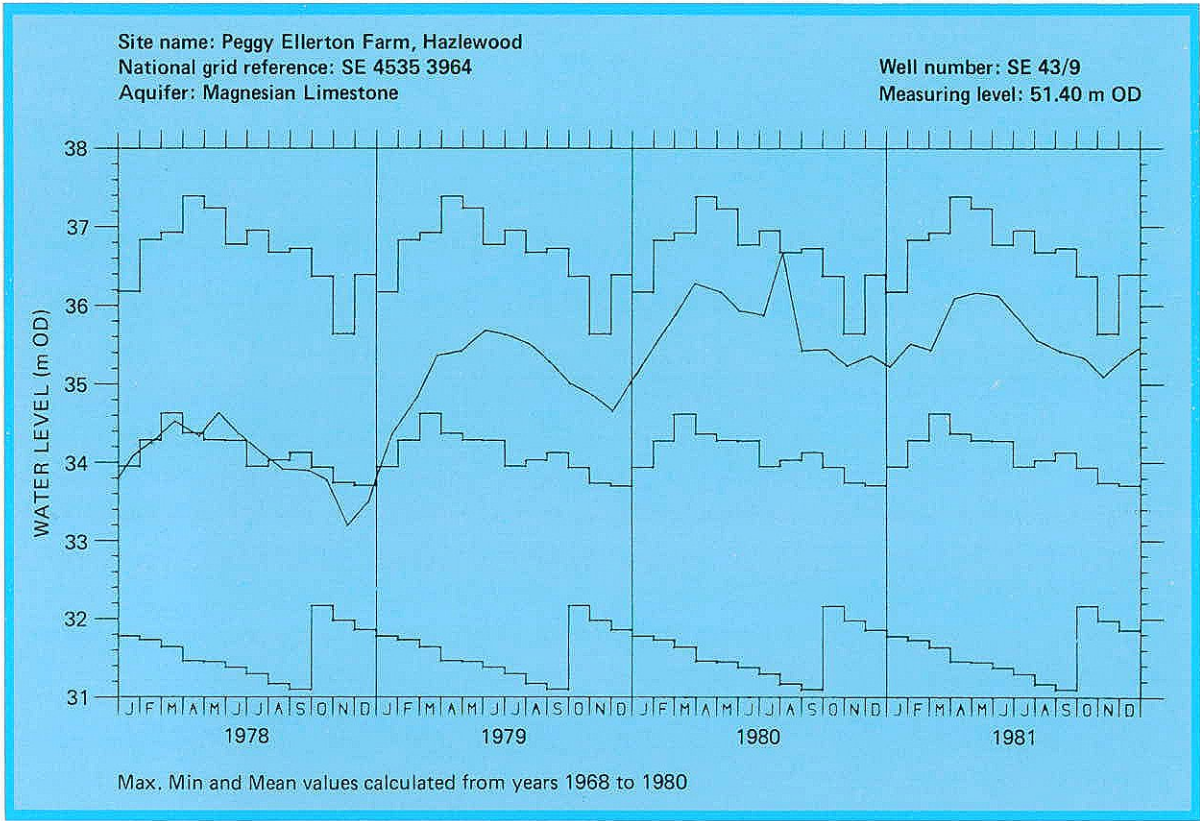


Figure 11—(continued).

THE GROUNDWATER DATA RETRIEVAL SERVICE

A suite of retrieval programs has been written in order to facilitate data usage. At the present time, retrievals using the options described below are available for most of the sites listed in the register of selected groundwater observation wells, although not all the data contained within this archive have been validated.

Five options are available for retrieving data. A description of each option is given below and examples of the computer listings and graphical output are given on pages 162 to 165. Options 1 to 4 give details of the well site, the period of record available, and maximum and minimum recorded levels in addition to the output specific to each option. Data may be retrieved for a specific well or for groups of wells defined by well reference numbers, by area (using National Grid References), by aquifer, by hydrometric area, by water authority, or by any combination of these parameters.

Cost of Service

To cover the computing and handling costs, a moderate charge will be made depending on the

output options selected. Estimates of these charges may be obtained on request; the right to amend or waive charges is reserved.

Requests for retrieval options:

Requests for retrieval options should include: the name and address to which the output should be directed, the sites, or areas, for which data are required together with the period of record of interest (where appropriate) and the title of the required option. Where possible, a daytime telephone number should be given.

Requests should be addressed to:

The British Geological Survey
Hydrogeology Research Group
Maclean Building
Crowmarsh Gifford
WALLINGFORD
OXFORDSHIRE OX10 8BB

Telephone: Wallingford (0491) 38800

LIST OF GROUNDWATER DATA RETRIEVAL OPTIONS

OPTION NUMBER	TITLE	NOTES
1	Table of groundwater levels	All recorded observations of groundwater level in metres above Ordnance Datum, with dates of observation and maximum and minimum levels for each year. Specific years, or ranges of years, may be requested, otherwise the full period of record is given.
	Table of annual maximum and minimum groundwater levels	Annual maximum and minimum groundwater levels in metres above Ordnance Datum with dates of occurrence. Specific years, or ranges of years, may be requested, otherwise the full period of record is given.
	Table of monthly maximum, minimum and mean groundwater levels	Monthly maximum, minimum and mean groundwater levels in metres above Ordnance Datum, together with the number of years contributing values to the calculation of each monthly mean. A specific period of years may be nominated, otherwise the full period of record is given.
	Hydrographs of groundwater levels	Provides a well hydrograph for a number of specified years. Castellated annual plots of monthly maximum, minimum and mean groundwater levels calculated from a nominated period of years are superimposed upon the hydrograph, provided that the nominated period exceeds 10 years. Tabulations

Site details

of the monthly maximum, minimum and mean values are also listed, together with the number of years of record used in the calculations, and the number of observations used for each month.

The output comprises the well reference number of the British Geological Survey, the original (Water Data Unit) station number (where applicable), the hydrometric area, the aquifer name and code, the site name and location, the National Grid Reference, the depth of the well, the datum points (from which measurements are made), the altitude of the ground surface, the period of record and the water authority area in which the well or borehole is located.

Examples of these five options follow.

OPTION 1 TABLE OF GROUNDWATER LEVELS

Station number	TF03/37
Station name	NEW RED LION, ASLACKBY (CONTINUES OLD RED LION)
Grid Reference	TF 0885 3034
Water Authority	AWA
Hydrometric Area	30
Aquifer	Lincolnshire Limestone
Aquifer Code	13
EEC Unit	ANO3
Surface Level (MOD)	33.82
Datum Point (MOD)	33.45
Well Depth (M)	50.00
Max. Expected (MOD)	33.45
Min. Expected (MOD)	5.00
Period of records in Archive:-	1964 to 1985
Maximum GW Level for period of records	23.69
Number of Maxima	1
Date(s):-	14 03 1977
Minimum GW Level for period of records	3.29
Number of Minima	1
Date(s):-	24 08 1976

(Note: The above reference information is also provided with the output from options 2-4)

Station Number	TF03/37
Year of record	1975
Date	Level (MOD)
03 Jan	17.29
31 Jan	16.68
28 Feb	17.85
04 Apr	20.31
24 Apr	20.12
02 May	20.13
30 May	18.58
13 Jun	17.34
11 Jul	15.77

01 Aug	14.44
29 Aug	13.24
26 Sep	12.11
10 Oct	11.57
07 Nov	10.42
21 Nov	9.85
19 Dec	8.98

Maximum GW level for year 20.31
 Number of maxima 1
 Dates 04 Apr
 Minimum GW Level for year 8.98
 Number of minima 1
 Dates 19 Dec

OPTION 2 TABLE OF ANNUAL MAXIMUM AND MINIMUM GROUNDWATER LEVELS

Year	Max/Min	Level(MOD)	Date(s)	No. of occasions
1965	Max	21.50	26 Dec	1
	Min	7.85	24 Jan	1
1966	Max	23.51	06 Mar	1
	Min	14.43	09 Oct-16 Oct	1 Period
1967	Max	19.79	04 Jun	1
	Min	12.69	29 Oct	
1968	Max	22.06	17 Nov	
	Min	14.08	07 Jul	
1969	Max	23.17	30 Mar	
	Min	11.83	16 Nov	
1970	Max	20.21	26 Apr	1
	Min	10.76	15 Nov	1

OPTION 3 TABLE OF MONTHLY MAXIMUM, MINIMUM AND MEAN GROUNDWATER LEVELS

Period maximum, minimum and mean groundwater levels for years 1964 to 1985

	Maximum	Minimum	Mean	No. of years
Jan	22.58	7.85	14.75	21
Feb	23.29	7.97	16.50	21
Mar	23.69	6.14	17.27	21
Apr	22.97	5.61	17.17	22
May	22.00	4.80	16.52	21
Jun	21.28	4.11	15.40	21
Jul	19.69	3.42	14.03	21
Aug	17.08	3.29	12.97	21
Sep	18.84	3.37	12.23	21
Oct	17.98	3.82	11.78	21
Nov	22.06	7.03	12.08	21
Dec	21.51	7.81	13.04	21

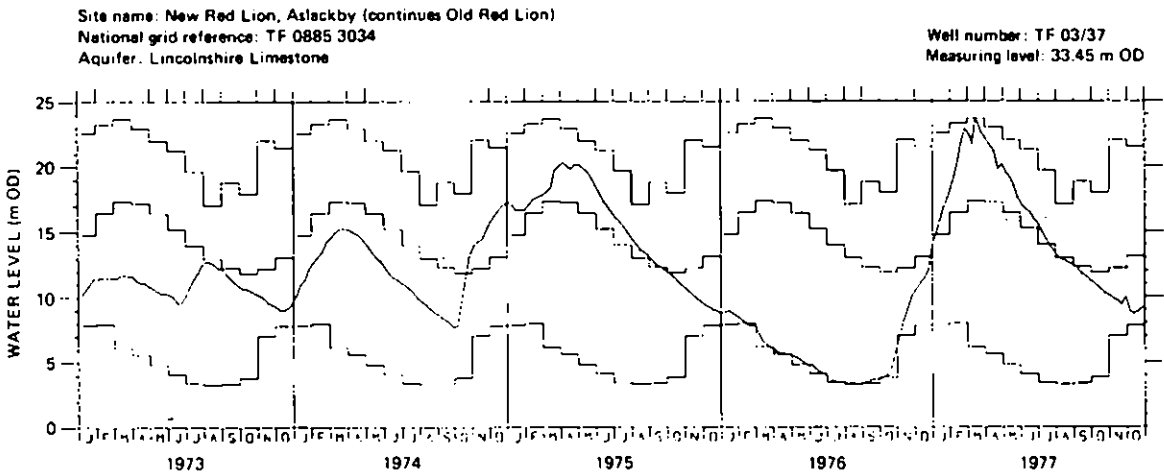
OPTION 4 HYDROGRAPHS OF GROUNDWATER LEVELS

Hydrograph of monthly maximums, minimums and means calculated from years 1964 to 1982

Therefore maximum number of years from which monthly maxs, mins and means may be calculated is 19

	Maximum	Minimum	Mean	No. of Years contributing values to mean calculations
Jan	22.58	7.85	14.77	18
Feb	23.29	7.97	16.47	18
Mar	23.69	6.14	17.34	18
Apr	22.97	5.61	17.23	19
May	22.00	4.80	16.42	19
Jun	21.28	4.11	15.23	19
Jul	19.69	3.42	13.97	19
Aug	17.08	3.29	12.98	19
Sep	18.84	3.37	12.28	19
Oct	17.98	3.82	11.85	19
Nov	22.06	7.03	12.20	19
Dec	21.51	7.81	13.09	19

Hydrograph(s) plotted for year ranges:- 1973 to 1977



Max, Min and Mean values calculated from years 1964 to 1982

OPTION 5 SITE DETAILS

BGS NUMBER	COMPUTER NUMBER	HA	AQ	NAME—LOCATION REC—PERIOD—WA AQUIFER	GRID REF.	DEPTH (M)	DATUM POINT	SURFACE LEVEL
NZ22/22	25624	25	17	RUSHYFORD NORTH EAST, GREAT CHILTON 1957-1985 NWA MAGNESIAN LIMESTONE	NZ 2875 2896	62.50	92.65	92.53
SE94/5	26352	26	6	DALTON ESTATE, DALTON HOLME 1889-1985 YWA CHALK AND UPPER GREENSAND	SE 9651 4530	28.50	34.57	33.50
SE43/9	27360	27	17	PEGGY ELLERTON FARM, HAZLEWOOD 1968-1985 YWA MAGNESIAN LIMESTONE	SE 4535 3964	55.42	51.40	51.40
TF03/37	30229	30	13	NEW RED LION, ASLACKBY (CONTINUES OLD RED LION) 1964-1985 AWA LINCOLNSHIRE LIMESTONE	TF 0885 3034	50.00	33.45	33.82
TF81/2	33343	33	6	WASHPIT FARM 1950-1985 AWA CHALK AND UPPER GREENSAND	TF 8138 1960	40.40	80.21	80.69
TL33/4	38511	38	6	THERFIELD RECTORY, THERFIELD 1883-1984 TWA CHALK AND UPPER GREENSAND	TL 3330 3720	84.10	154.82	154.82
SU17/57	39350	39	6	ROCKLEY, OGBOURNE ST. ANDREW 1933-1985 TWA CHALK AND UPPER GREENSAND	SU 1655 7174	17.60	146.57	146.39
SU71/23	41426	41	6	COMPTON HOUSE, COMPTON 1894-1985 SWA CHALK AND UPPER GREENSAND	SU 7755 1490	53.80	81.37	81.37
SJ87/32	68476	68	16	DALE BROW, MACCLESFIELD 1973-1984 NWWA PERMO-TRIASSIC SANDSTONES	SJ 8969 7598	152.40	138.66	138.36

DIRECTORY OF MEASURING AUTHORITIES

	Address	Code
Water Authorities		
Anglian Water Authority	Amebury Road, Huntingdon PE18 6NZ	AWA
Northumbrian Water Authority	Northumbria House, Regent Centre, Gosforth, Newcastle- upon-Tyne, NE3 3PX	NWA
North West Water Authority	Dawson House, Liverpool Road, Great Sankey, Warrington, WA5 3LW	NWWA
Severn Trent Water Authority	Abelson House, 2297 Coventry Road, Sheldon, Birmingham, B26 3PU	STWA
Southern Water Authority	Guildbourne House, Chatsworth Road, Worthing BN11 1LD	SWA
South West Water Authority	Peninsular House, Rydon Lane, Exeter EX2 7HR	SWWA
Thames Water Authority	New River Head, Rosebery Avenue, London EC1R 4TP	TWA
Welsh Water Authority	Cambrian Way, Brecon, Powys LD3 7HP	WELS (WELSH)
Wessex Water Authority	Wessex House, Passage Street, Bristol BS2 0JQ	WWA
Yorkshire Water Authority	West Riding House, 67 Albion Street, Leeds LS1 5AA	YWA
River Purification Boards		
Clyde River Purification Board	Rivers House, Murray Road, East Kilbride, Glasgow G75 0LA	CRPB
Forth River Purification Board	Colinton Dell House, West Mill Road Colinton, Edinburgh, EH13 0PH	FRPB
Highland River Purification Board	Strathpeffer Road Dingwall IV15 9QY	HRPB
North East River Purification Board	Woodside House, Persley, Aberdeen AB2 2UQ	NERPB
Solway River Purification Board	Rivers House, Irongray Road Dumfries DG2 0JE	SRPB
Tay River Purification Board	3, South Street Perth PH2 8NJ	TRPB
Tweed River Purification Board	Burnbrae, Mossilee Road, Galashiels TD1 1NF	TWRPB
Other measuring authorities		
Borders Regional Council	West Grove, Waverley Road, Melrose TO6 9SJ	BRWO
Corby and District Water Company	Stanion Lane, Corby NN18 8ES	CDWC

Department of the Environment (Northern Ireland)	Stormont, Belfast BT4 3SS	DOE (NI)
Dumfries and Galloway Regional Council (Water Department)	70 Terregles Street Dumfries DG2 9BB	DGRW
Essex Water Company	342 South Street Romford RM1 2AL	EWG
Grampian Regional Council (Water Services Department)	Woodhill House, Ashgrove Road West, Aberdeen AB9 2LU	GRWD
Greater London Council	Public Heath Engineering, Drury House, 32 Vauxhall Bridge Road, London SW1V 2SA	GLC
Highland Regional Council (Water Department)	Regional Buildings Glenurquhart Road Inverness IV3 5NX	HRCW
Institute of Hydrology	Maclean Building, Crowmarsh Gifford, Wallingford, OX10 8BB	IH
Lothian Regional Council (Water Supply Services Department)	6 Cockburn Street, Edinburgh	LRWD
Newcastle and Gateshead Water Company	PO Box 10, Allendale Road, Newcastle-upon-Tyne NE6 2SW	NGWC
North of Scotland Hydro- Electric Board	16 Rothesay Terrace, Edinburgh EH3 7SE	NSHE
Strathclyde Regional Council (Water Department)	419 Balmore Road, Glasgow G22 6NU	SRCW
Tayside Regional Council (Water Services Department)	Bullion House, Invergowrie, Dundee DD2 5BB	TRWS

PUBLICATIONS

Title	Published	Price (inclusive of second class postage within UK)	
		<i>Loose Leaf</i>	<i>Bound</i>
1. Yearbook 1981.	1985	£10	£12
2. Yearbook 1982.	1985	£10	£12
3. The 1984 Drought.	1985		£12

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the published data is made. The revised data sheets will normally be issued on an annual basis.

All the Hydrological data: UK publications and the ring binder may be obtained from:-

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Telephone: Wallingford (0491) 38800

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